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P U B L I C H E A R I N G

before

SENATE LABOR, INDUSTRY AND PROFESSIONS COMMITTEE

SENATE BILL NO. 3741

(Expands the scope of the "Pesticide Control Act of 1971")

October 10, 1989
Room 334
State House Annex
Trenton, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Senator Raymond Lesniak, Chairman
Senator Christopher J. Jackman, Vice Chairman
Senator Gerald Cardinale

ALSO PRESENT:

Dale C. Davis, Jr.
Office of Legislative Services
Aide, Senate Labor, Industry
and Professions Committee

* * * * * * * * * * *

Hearing Recorded and Transcribed by
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New Jersey State Legislature
SENATE LABOR, INDUSTRY
AND PROFESSIONS COMMITTEE
STATE HOUSE ANNEX, CN-068
TRENTON, NEW JERSEY 08625
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September 15, 1989

NOTICE OF PUBLIC HEARING

The Senate Labor, Industry and Professions Committee will hold a public hearing on Tuesday, October 10, 1989 at 10:00 A.M. in Room 334, State House Annex, on the following bill:

S-3741 Lesniak — Expands the scope of the "Pesticide Control Act of 1971."

Anyone wishing to testify should contact Dale Davis, Committee Staff, at (609) 984-0445.

Please provide 12 copies of any written testimony to be submitted to the committee.

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SENATE, No. 3741

STATE OF NEW JERSEY

INTRODUCED JUNE 30, 1989

By Senators LESNIAK and D'AMICO

AN ACT concerning pesticides and amending and supplementing P.L.1971, c.176.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. Section 6 of P.L.1971, c.176 (C.13:1F-6) is amended to read as follows:

6. a. There is [hereby] created in the department a Pesticide Control Council which shall consist of [nine] 14 members, three of whom shall be the Secretary of Agriculture, the Commissioner of Health, the Dean of the College of Agriculture and Environmental Science of Rutgers, The State University, or their designees, who shall serve as ex officio, and [six] 11 citizens of the State representing the general public to be appointed by the Governor, to serve at his pleasure [, of whom one shall be a farmer, one a toxicologist and one an ecologist]. Of these members, one shall be appointed from persons with training and experience in toxicology, recommended by recognized research or academic organizations; one from persons with training or experience in ecology, recommended by recognized research or academic organizations; one from persons holding an M.D. degree and trained in occupational safety and health, recommended by the department of community medicine at the University of Medicine and Dentistry; one from persons with training or experience in groundwater hydrology, recommended by recognized academic or professional organizations; one from persons with training and experience in farming, recommended by recognized organizations of farmers; one from persons with training and experience in organic farming, recommended by recognized organizations of organic farmers; one from persons recommended by recognized organizations of farmworkers; one from persons recommended by recognized organizations of pesticide applicators; one from persons recommended by

EXPLANATION—Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and is intended to be omitted in the law.

Matter underlined thus is new matter.

recognized environmental organizations; one from persons with training or experience in integrated pest management, recommended by recognized organizations of farmers; and one from persons recommended by recognized public interest organizations. The Governor shall designate a chairman and a vice chairman of the council from the public members who shall serve at the [will] pleasure of the Governor.

In the event that no recommendations for a particular category of membership are made to the Governor three months prior to the effective date of this amendatory and supplementary act in the case of the initial appointments, or within 60 days of the date of the expiration of the term of office of any member or the occurrence of any vacancy in the case of subsequent appointments, the Governor shall appoint as a member for that category of membership a person whom he believes will be representative thereof.

b. Of the six members first to be appointed, two shall be appointed for terms of [2] two years, two for terms of [3] three years and two for terms of [4] four years. Of the four members first to be appointed pursuant to P.L. , c. (now pending before the Legislature as this bill), two shall be appointed for terms of two years, and two for terms of three years. Thereafter all appointments shall be made for terms of [4] four years. [All appointed members shall serve after the expiration of their terms until their respective successors are appointed and shall qualify, and any vacancy occurring in the appointed membership of the council shall be filled in the same manner as the original appointment for the unexpired term only, notwithstanding that the previous incumbent may have held over and continued in office as aforesaid.]

c. Members of the council shall serve without compensation, but shall be entitled to reimbursement for expenses in attendance at meetings of the council and in performance of their duties as members thereof.

(cf: P.L.1971, c.176, s.6)

2. Section 7 of P.L.1971, c.176 (C.13:1F-7) is amended to read as follows:

7. The Pesticide Control Council shall be the advisory body in the Department of Environmental Protection in matters relating

to the control, regulation and use of pesticides and is empowered to:

a. Request from the commissioner such information concerning pesticides as it may deem necessary;

b. Study and consider any matter relating to the improvement of pesticide control programs and advise the commissioner thereon;

c. From time to time submit to the commissioner such recommendations and reports which it deems necessary for the proper conduct and improvement of pesticide control programs;

d. Study the use, application and disposal of pesticides and advise the commissioner thereon;

e. Study pesticide control programs and make reports and recommendations thereon to the commissioner as it may deem necessary;

f. Study any regulations promulgated by the department or any other governmental entity in regard to the control of pesticides and make such recommendations thereon to the commissioner as it may deem appropriate;

g. Study and investigate the state of the art and the technical capabilities and limitations of regulations concerning use and control of pesticides and their relation to the environment and ecology and report its findings and recommendations thereon to the commissioner;

h. Study and investigate the need for programs for long range technical support of pesticide control programs and report its findings and recommendations thereon to the commissioner; [and]

i. Hold periodic public hearings concerning the use and application of pesticides and upon the state of the art and technical capabilities and limitations in pesticide control and report its recommendations thereon to the commissioner; and

j. Review the findings and recommendations of the Pesticide Technical Advisory Committee and make appropriate recommendations to the commissioner.

(cf: P.L.1971, c.176, s.7)

3. (New section) The council shall prepare and submit to the Governor and the Legislature an annual report summarizing its activities and making any recommendations for legislative or administrative action it deems appropriate.

4. (New section) There is created in the department a Pesticide Technical Advisory Committee to advice the Pesticide Control Council and the department, comprising no more than nine members. Two members shall be appointed by the commissioner and represent the department, and two members shall be appointed by the Commissioner of Health and represent the Department of Health. The commissioner may appoint no more than five additional members as deemed necessary to carry out the duties of the committee. The members of the committee shall have expertise in scientific disciplines appropriate for pesticide evaluations.

The committee shall:

a. Formulate criteria for triggering reviews of pesticides and develop a priority scheme for scientific evaluations.

b. Provide recommendations regarding budget needs to fund pesticide technical reviews and studies.

c. Oversee the progress of pesticide assessments and pesticide related research.

d. Review the findings of the technical studies and reviews and make appropriate recommendations.

The committee shall meet at least quarterly, and shall prepare and submit to the Pesticide Control Council and the department a report of its activities at least annually. A per diem fee shall be provided to members for time allocated to committee responsibilities.

5. (New section) No person may be authorized to apply any pesticide commercially without having received certification as a commercial pesticide applicator from the department. Application for certification shall be made to the department, on forms prescribed by the department, and shall provide such information as the department may require. The department shall not grant this certification unless it determines that the applicant is knowledgeable concerning the toxic nature and adverse effects of pesticides, and is adequately trained regarding the precautions necessary to minimize human exposure to any potentially hazardous pesticide.

As used in this section, "commercial pesticide applicator" means any person (whether or not a private pesticide applicator with respect to some uses) who uses, or supervises the use, of any

pesticide for any purpose or on any property other than as provided by the definition of "private pesticide applicator." Any employee of a governmental agency who engages in the use and application of pesticides as is necessary within the scope of his employment is considered a commercial applicator.

"Commercial pesticide applicator" shall not include:

a. A person applying a general use pesticide by equipment, other than aerial, in or around a private residence owned or rented and resided in by the person. In multi-family private residences, this subsection shall apply to that person only in the individual unit in which he resides.

b. A person applying a general use pesticide by equipment other than aerial for himself or his employer on property or premises owned or rented by him or his employer and utilized for non-residential purposes provided:

(1) The application does not involve more than three acres of land;

(2) The application is not made to an area where food or foodstuffs for human consumption are prepared, served, or stored; and

(3) The property or premises to which the pesticide is applied is not utilized by an operation involving more than 10 employees; or

c. A person applying a pesticide on property or premises owned or rented by the federal government:

(1) If that person is a federal employee engaged in the performance of his official duties; and

(2) If that person has been certified as an applicator of pesticides under a federal agency plan which has been approved by the United States Environmental Protection Agency pursuant to the provisions of section 4 of the "Federal Insecticide, Fungicide and Rodenticide Act," as amended; or

d. A person applying antimicrobial agents unless those agents have been classified as restricted use pesticides.

As used in this section, "private pesticide applicator" means any person who uses or supervises the use of any pesticide for purposes of producing any agricultural commodity on property owned or rented by him or his employer or, if applied without compensation other than trading of personal services between producers of agricultural commodities, on the property of another person.

6. (New section) The department may, by rule or regulation adopted pursuant to the "Administrative Procedure Act," (P.L.1968, c.410 (C.52:14B-1 et seq.), require the registration of persons who inspect structures for pest infestation and issue certificates to attest to their findings. The department shall base such registration on a competency standard which may include a written examination.

7. (New section) No person may aerially apply any broad-spectrum chemical pesticide on land not actively devoted to agriculture or horticultural use, except in the case of mosquito control where the department determines that no practical alternative is available, or other health or agricultural emergencies. In the event of a health or agriculture emergency, the department, in consultation with the Department of Health or the Department of Agriculture, as appropriate, may grant an exemption. Upon granting the exemption, the department shall make available a separate written report setting forth the emergency condition that required the immediate action. The department shall also make every attempt to notify the general public and interested citizens for input prior to the aerial application. As used in this section, "broad-spectrum chemical pesticide" means any non-specific pesticide toxic to a wide-range of target and non-target organisms.

8. (New section) The Department of Environmental Protection, in consultation with the Department of Agriculture and the Department of Health, within one year of the effective date of this amendatory and supplementary act and pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C. 2:14B-1 et seq.), shall adopt rules and regulations establishing notification zones and procedures designed to afford all people who may be exposed to pesticides the opportunity to avoid exposure.

To the greatest extent practicable, notification shall be made directly by mail, telephone or personal service to persons within the notification zone prior to a pesticide application. When direct notification is not feasible, other means shall be designed to maximize the number of people notified. Legal advertisements alone shall not constitute notice under this section. The department may direct county or municipal governing bodies to assist in carrying out its responsibilities under

this section. As used in this section, "notification zone" means that area within which persons may reasonably be expected to be exposed to a pesticide during and after its application.

9. (New section) The department shall implement, according to rules and regulations adopted pursuant to the "Administrative Procedure Act," a permit program for municipal gypsy moth control not under the jurisdiction of the Department of Agriculture spray program.

10. (New section) The department shall prepare, and provide to all farmowners, forms on which farmowners shall insert the following information: the crop, the pesticide applied to that crop, reentry date and time for safe reentry to treated fields, and the exact date and location of application. The headings on this form shall be printed in English and Spanish.

11. (New section) The Department of Health shall prepare pamphlets written at a fifth grade reading level in English and Spanish and provided to the farmowners for distribution to his farmworker employees on the first day of employment, including, but not limited to the following:

a. General pesticide health and safety, preventive practices in the field and farmworker residential area, signs and symptoms of pesticide poisoning, first aid and medical care, and methods for seeking assistance from State and federal agencies if a pesticide problem occurs;

b. Names and addresses of health providers in the vicinity who are trained in pesticide evaluation and have bi-lingual staff; and

c. The rights of farmworkers to obtain the information and training provided pursuant to P.L. c. (now before the Legislature as this bill) as well as rights under other State and federal laws.

12. (New section) a. Every farmowner shall complete a record of application on the forms prepared by the department pursuant to section 10 of P.L. c. (now before the Legislature as this bill).

b. Every farmowner shall post the completed record of application forms in a central location visited daily by all farmworkers who work in the fields.

c. Every farmowner shall provide the pamphlets prepared by the Department of Health pursuant to section 11 of

P.L. c. (now before the Legislature as this bill) to all farmworker employees who work in the fields, or who mix, load, apply, or store pesticides, or who work in a packing house on the farm premises.

d. The farmowner shall also maintain a Material Safety Data Sheet on each pesticide product used on crops or stored, which shall be made available to the farmworker employees upon request.

13. (New section) Every farmowner shall be responsible for training his farmworker employees who work in the fields, or who mix, load, apply, or store pesticides, or who work in a packing house on the farm premises. The training shall be conducted by a person certified as a trainer by the Department of Health. The training shall be compatible with United States Environmental Protection Agency and Occupational Safety and Health Administration regulations, shall be conducted in either English or Spanish depending on the primary language of the farmworker, and shall include, but not be limited to, the following topics:

a. Health hazards of pesticides;

b. Steps to employ to avoid exposure, such as workplace practices, personal protective clothing and equipment;

c. Steps to employ if exposed, such as recognizing signs and symptoms, first aid and emergency response, and seeking medical care;

d. Identification of the pesticides being applied by using the workplace chemical lists, labels and the Material Safety Data Sheets; and

e. Farmworker rights under the laws concerning:

(1) Hazard communication (written information and training), protection from exposure to pesticides, and field sanitation;

(2) Agencies responsible for enforcing the laws; and

(3) Procedures for filing complaints to, and obtaining information from, these agencies.

14. (New section) a. The Commissioner of Health shall, by rule or regulation, establish a mechanism for the reporting by physicians and veterinarians of incidents of pesticide exposure to the Department of Health.

b. The Department of Health shall identify health providers who provide health services to farmworkers and train these

providers in the recognition, evaluation and treatment of pesticide exposure.

c. The Department of Health shall develop and implement, in cooperation with local health officers and State and local medical associations, a program of medical education to alert physicians and other health care professionals to the symptoms, diagnosis, treatment, and reporting of cases of acute pesticide poisoning and chronic pesticide-related health effects, and to the known or suspected acute and chronic health effects of pesticides on children and other persons known or suspected to be particularly susceptible to adverse effects of pesticide exposure.

15. (New section) The Department of Environmental Protection and the Department of Health shall jointly develop a mechanism by which pesticide incidents reported to one department shall be referred to the other.

16. (New section) An employee shall have the right to refuse to enter a field when instructed to enter before the minimum reentry time has elapsed or if the information to which he is entitled has not been provided.

17. (New section) a. No employer may discharge, cause to be discharged, or otherwise discipline, penalize, or discriminate against any employee because the employee or his employee representative has exercised any right established in this act.

b. Any employee who believes that he has been discharged, or otherwise disciplined, penalized, or discriminated against by an employer in violation of subsection a. of this section may, within 30 days of the violation, or within 30 days of obtaining knowledge that a violation occurred, file a complaint with the Commissioner of the Department of Labor alleging the violation. Within 30 days of the receipt of a complaint, the commissioner shall conduct an investigation of the complaint. If after the investigation the commissioner determines that there is probable cause that the complaint is valid, he may refer the complaint to the Office of Administrative Law, which, upon the referral, shall commence an adjudicatory proceeding on the complaint, to be conducted as a contested case pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), and P.L.1978, c.67 (C.52:14F-1 et seq.). If the Commissioner of Labor or the employee introduces evidence that prior to the

alleged violation the employee exercised any right provided in this act, the employer shall have the burden to show just cause for his action by clear and convincing evidence. Within 45 days of the receipt of the recommendations of the administrative law judge, the commissioner shall adopt, reject, or modify the recommendations. The final decision of the commissioner shall be considered the final agency action thereon for the purposes of the "Administrative Procedure Act" and shall be subject only to judicial review as provided in the Rules of Court.

18. (New section) Any person may bring a civil action in law or equity against the Department of Environmental Protection or the Department of Health for failure to enforce the provisions of this act or any rule or regulation promulgated pursuant thereto. The Superior Court shall have jurisdiction of these actions, and it shall not be necessary to the maintenance of the action that the person bringing the action prove that he has suffered or will suffer personal loss or damage. The court may award, whenever it deems appropriate, costs of litigation, including reasonable attorney and expert witness fees.

19. (New section) Any person whose property or person is exposed to a pesticide resulting from a violation of this act may bring a civil action in law or equity on his behalf against any person for a violation of any provisions of this act or any rule and regulation promulgated pursuant thereto. The court, upon finding violations of this act based upon proof established by a preponderance of the evidence, shall award compensatory damages and may award punitive damages for violations which are wantonly reckless or malicious. It shall also award such equitable relief as is necessary and appropriate to effectuate the purposes of this act.

20. Section 9 of P.L.1971, c.176 (C.13:1F-9) is amended to read as follows:

9. The department shall have power, in addition to those granted by any other law, to

a. Conduct and supervise research programs for the purpose of determining the effects and hazards of the use and application of pesticides on man and his environment; and in furtherance of this research effort the commissioner shall consider the School of Agriculture of Rutgers, The State University, as a primary source of assistance;

b. Conduct and supervise Statewide programs of pesticide control education including the preparation and distribution of information relating to pesticide control;

c. Enter and inspect any building or place, except private residences, for the purpose of investigating an actual or suspected violation of law relating to pesticides and ascertaining compliance or noncompliance with any rules, regulations or orders of the department;

d. Receive or initiate complaints of violations of applicable laws, rules, regulations and orders relating to pesticides and institute legal proceedings for the prevention of such violations and for the recovery of penalties, in accordance with law;

e. With the approval of the Governor, cooperate with, and receive money from, the Federal Government, the State Government, or any county or municipal government or from private sources for the study and control of pesticides;

f. Declare as a pest any form of plant or animal life or virus which is injurious to plants, man, domestic animals, articles, or substances;

g. Determine whether pesticides are highly toxic to man;

h. Determine standards of coloring or discoloring for pesticides;

i. Subject pesticides to the requirements of Section 11 of P.L.1971, c.176 (C.13:1F-11);

j. Cooperate with, and enter into agreement with, any other agency of this State, or the United States, and any other state or agency thereof for the purpose of carrying out the provisions of this act and securing uniformity of regulations, in order to avoid confusion endangering the public health, resulting from diverse requirements, particularly as to the labeling and coloring of pesticides, and to avoid increased costs due to the necessity complying with such diverse requirements in the manufacture and sale of such pesticides;

k. Have the power, in accordance with a fee schedule adopted as a rule or regulation in accordance with the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), to establish and charge fees for any of the services it performs, which fees shall be annual or periodic as the department shall determine. The fees charged by the department pursuant to this section shall

reflect the actual or projected expense incurred by the department in the performance of the service for which the fee is charged. All fees collected pursuant to this section shall be deposited in the Environmental Services Fund created pursuant to P.L.1975, c.232 and kept separate from other receipts deposited therein and appropriated for the operation of the Pesticide Control Program in the Department of Environmental Protection. The criteria for registration, certification, or permit fees shall reflect the actual or projected [expense] expenses incurred by the department in [the performance of the service for which the fee is charged] regulating and monitoring the distribution, use, application, handling, transportation and disposal of pesticides, less the amount of other program service fees collected hereunder by the department. Program costs may include the costs to the department of planning, developing rules and regulations, reviewing, issuing and administering registrations, certifications or permits, and monitoring compliance with this act and departmental rules and regulations, and educational programs adopted pursuant thereto. A separate fee schedule shall be adopted for each registration, certification, or permit program to reflect the program costs thereof. To the extent practicable and as may be equitable, the amount of the fee shall take into account the quantity and toxicity of the pesticides to be handled or utilized by the holder of the registration, certification, or permit.

(cf: P.L.181, c.538, s.1)

21. Section 10 of P.L.1971, c.176 (C.13:1F-10) is amended to read as follows:

10. a. If any person violates any of the provisions of this act or any rule, regulation or order promulgated pursuant to the provisions of this act, the department may institute a civil action in a court of competent jurisdiction for injunctive relief to prohibit and prevent such violation or violations and the said court may proceed in the action in a summary manner.

b. Any person who violates the provisions of this act or any rule, regulation or order promulgated pursuant to this act shall be liable to a penalty of not more than [$3,000.00] $25,000 for each offense, to be collected in a civil action by a summary proceeding [under the Penalty Enforcement Law] pursuant to "the penalty

enforcement law" (N.J.S. 2A:58-1 et seq.) or in any case before a court of competent jurisdiction wherein injunctive relief has been requested. The Superior Court [, County Court and county district court] shall have jurisdiction to enforce [said Penalty Enforcement Law] "the penalty enforcement law". If the violation is of a continuing nature, each day during which it continues subsequent to an order to cease the violation shall constitute an additional, separate and distinct offense.

No civil administrative penalty shall be levied except subsequent to the notification of the violator by certified mail or personal service. The notice shall include a reference to the section of the statute, regulation, order or permit condition violated; a concise statement of the facts alleged to constitute the violation; a statement of the amount of the civil penalties to be imposed; and a statement of the violator's right to a hearing. The violator shall have 20 days from receipt of the notice within which to deliver to the commissioner a written request for a hearing. Subsequent to the hearing and upon a finding that a violation has occurred, the commissioner may issue a final order after assessing the amount of the fine specified in the notice. If no hearing is requested, the notice shall become a final order upon the expiration of the 20-day period. Payment of the penalty is due when a final order is issued or when the notice becomes a final order. The authority to levy a civil administrative penalty is in addition to all other enforcement provisions in this act, and the payment of a civil administrative penalty shall not be deemed to affect the availability of any other enforcement provision in connection with the violation for which the penalty is levied.

c. The department is [hereby] authorized [and empowered] to compromise and settle any claim for a penalty under this section in such amount in the discretion of the department as may appear appropriate and equitable under all of the circumstances including the posting of a performance bond by the violator.

d. Any person who violates this act or an administrative order issued pursuant to subsection b. of this section or a court order issued pursuant to subsection a. of this section or who fails to pay a civil administrative penalty in full pursuant to subsection b. of this section is subject, upon order of the court, to a civil penalty not to exceed $25,000.00 per day of the violation, and each day's

continuance of the violation constitutes a separate and distinct violation. Any penalty imposed under this subsection may be recovered with costs in a summary proceeding pursuant to "the penalty enforcement law". The Superior Court shall have jurisdiction to enforce "the penalty enforcement law."

e. All fines collected pursuant to this section shall be deposited in the Environmental Services Fund created pursuant to P.L.1975, c.232 and kept separate from other receipts deposited therein, and shall be appropriated for the support of the Pesticide Control Program in the Department of Environmental Protection.

22. This act shall take effect immediately.

STATEMENT

The purpose of this bill is to strengthen the State's program for controlling the use of pesticides. The bill extends responsibilities and authority of the Department of Environmental Protection (DEP), assigns specific responsibilities to the Department of Health, and expands the scope of the "Pesticide Control Act of 1971," P.L.1971, c.176 (C.13:1F-1 et seq.) to promote the safe use of chemical pesticides and protect the public health and environment.

Specifically, the bill would establish a Pesticide Technical Advisory Committee with scientific expertise to provide recommendations concerning pesticide evaluations. The committee will report directly to the Pesticide Control Council, which would be expanded under the bill to provide for additional expertise.

The bill would further require DEP certification of all persons commercially applying pesticides, the certification conditioned upon a finding that the applicant is knowledgeable concerning the nature and effects of pesticides and trained in their safe use and control.

The bill would give the department authority to require the registration of persons who inspect structures for pest infestation.

The bill would restrict the aerial application of a broad-spectrum chemical pesticide on non-agricultural lands to certain emergencies. The bill would require DEP to design

notification procedures to afford all persons who may be exposed to pesticides the opportunity to avoid exposure. The department would also be directed to set up a permit program for municipal gypsy moth control not under the jurisdiction of the Department of Agriculture spray program.

The bill also places specific attention to the safety of farmworkers. DEP would develop forms, which farmowners would complete with specific information and provide to farmworkers. The Department of Health would develop pamphlets addressing safety generally with respect to using pesticides. The farmowners shall provide this information to his farmworkers on the first day of employment. The bill would also require all farmworkers to be trained by persons certified by the Department of Health concerning the hazards of pesticides, techniques to minimize exposure, first aid, and laws established to protect farmworkers from pesticide exposure. The bill would also require the Department of Health to implement a system for the mandatory reporting of pesticide exposure incidents.

Finally, the bill would increase the maximum fines that may be collected and dedicate all fines to the operation of the program. DEP may utilize its existing fee structure to fund its new responsibilities under this bill.

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Hazardous Substances

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mjz: 1-116

SENATOR RAYMOND LESNIAK (Chairman): The meeting is now going to come to order. I want to thank you all for coming down. Because we have a very crowded room, I would like everyone to please not talk, because it will be difficult for us to hear the testimony.

This is a public hearing on legislation which I have introduced -- S-3741 -- regarding the Pesticide Control Act, which was last amended in 1981, under the revision which I sponsored.

We have a lot of witnesses to be heard today. I don't see how we can possibly hear everybody because of the extent of the--

SENATOR JACKMAN: Give them a minute apiece.

SENATOR LESNIAK: --witness list. I want to thank Vice Chairman Chris Jackman for being here, and also Senator Cardinale. The Legislature is out of session, but I felt that this bill is important enough for us to get information on it, so that when the Legislature does return, we can see some action on the bill.

I would like to first call Tony McMahon, from the Department of Environmental Protection.

A N T H O N Y J. M c M A H O N: Good morning, Mr. Chairman and members of the Committee. First, let me thank you for this opportunity to testify on Senate Bill No. 3741. I would like to congratulate the sponsor and the members of this Committee for their work in the area of pesticides.

The Department generally supports this bill, especially in the areas of enforcement and farm worker protection. We feel that in particular those areas are strong and need the language as provided by the bill.

With me today is Mr. Ralph Smith, who is a Bureau Chief from the Pesticide Program. I have provided written testimony, so I will go through the main points in outline form.

First, on page 1, section 6 a., the Department supports the concept of expanding the Pesticide Control Council. The Council needs to be a well-balanced, knowledgeable organization. However, we suggest several changes:

First of all, we think the Council should consist of 15 members, rather than 14, that for the obvious reason of situations that might involve a tie, where it would be seven votes on one side and seven votes on the other side. Normally, councils are an odd number.

There are several other minor modifications to the qualifications of the Council members that we would like to suggest; for example, the "organic farmer." We would like to see that replaced with a "county health officer." It is our feeling that the organic farmer would have similar qualifications to the integrated pest management expert. I would think that that would give us a broader perspective of having the county health officer, who has enforcement experience and local government experience.

Secondly, we believe that the "environmental representative" should be replaced with a "fish and game and wildlife expert." Again, obviously the wildlife expert would be an environmental individual. We believe that this area of expertise is one in particular that the Council and those dealing with pesticides could use.

Thirdly, we would like to see the fifteenth member be a representative of the pesticide manufacturing industry. That is one area that is currently not included on the Council. We think that change would have a positive impact and give us good information.

On page 3, section 3-- That is a section that concerns us. Right now, the bill, as drafted, would require that the Council submit a written report to the Commissioner and the Legislature. This seems contradictory to section 6 a.,

which identifies the Council as working -- as being in the Department of Environmental Protection. It seems to us that if we were to agree with this particular section, it would almost set up a situation where the Council would be encouraged to do end run type situations, where if the Council didn't agree with the Commissioner's action, it would simply go to the Legislature.

We think that is inappropriate. This is an advisory Council to the Department, to the Commissioner, and the report should go to the Commissioner.

The Department supports the provision on page 4, section 4, for the formalization of a Technical Advisory Committee. This Technical Advisory Committee already exists in the Department. However, formalizing that body, with appropriate representatives from the Departments of Health and Agriculture, we think would be a positive step, and we support that section.

The Department is concerned about the certification provisions contained on pages 4 and 5, in section 4. Here I think we have to realize what we mean by certification. As the bill stands now, it would require that basically everyone who handles pesticides be certified; get a full certification from the Department. I think we have to realize what that certification entails. At this point, certification is a very, very high standard which is demanded of those individuals who can obtain that certification. There is a significant amount of testing, a significant amount of training, and we are very concerned that if we were to require everyone to have that same level of certification, that, in fact, that would degrade from the overall -- either it would degrade from the overall quality of the individuals having that certification, or it would tend to eliminate people from doing pesticide business, who, in fact, can do that kind of business. So, we are concerned about that particular section.

The Committee should realize that the Department already has an Operator Licensing Program, under which individuals who are not fully certified, but might handle pesticides under the supervision of a certified applicator, have to take certain courses and certain training. We believe that is the appropriate route to go.

SENATOR LESNIAK: May I ask you a couple of questions on that point? You're saying that everyone who commercially applies for pesticide handling has to go through a personal licensing program themselves?

MR. McMAHON: There is a licensing-- The exception would be if the person applying the pesticide was in direct view of the certified applicator. That would be about the only exception. We already have this. We could upgrade that, we could tighten it a little bit further, but again, we think that that is part of our existing authority -- our existing regulations. Therefore, we recommend that this section be deleted.

Page 5, section 6, calls for a home inspection certification program. The Department fully supports this section. In fact, we have been suggesting that this exist for some time. We are very pleased that the sponsor has included this section, and we support it strongly.

Section 7, on page 6, deals with the aerial applications. In fact, it would basically ban the application of broad spectrum chemical pesticides. This gives us great concern.

SENATOR LESNIAK: Wait a minute. Ban the application in certain circumstances, or outside of certain circumstances?

MR. McMAHON: That is correct; that is correct. There are certain exceptions where one could obtain an exception to apply the aerial pesticide. However, it is very limited, and very burdensome. We are concerned, and if I may draw you into a story for a second-- Here is a homeowner, or a property

owner, with maybe five or ten acres of trees, where those trees are contaminated with some sort of an insect which is destroying the trees. Under this provision, the only option that that individual would have for dealing with that problem would be to apply a pesticide from the ground -- from the ground up. In that case, it is probable, in fact, that more pesticides would be used, and potentially more damage -- more harm could happen as a result of that ground level application than would otherwise happen if there were an aerial application.

This bill really, we think, almost arbitrarily eliminates aerial applications of chemical pesticides. The Department currently has very, very strong regulations dealing with aerial pesticides. We regulate what can be applied, where it can be applied, the distance from properties and so on, and we believe that, in fact, this would have a negative impact on the environment in the State of New Jersey.

We have provided some alternative language.

SENATOR JACKMAN: May I ask you a question?

MR. McMAHON: Yes, Senator.

SENATOR JACKMAN: Who does the checking? On the subject matter you just finished talking about, who does the checking on it? Do you have someone available when the farmers are doing something around their trees? Do you have someone who comes in?

MR. McMAHON: The Department has inspectors who follow-up on aerial applications.

SENATOR JACKMAN: In this entire State? How many inspectors do you have?

MR. McMAHON: We have about 15 inspectors.

SENATOR JACKMAN: Fifteen?

MR. McMAHON: Yes.

SENATOR JACKMAN: How many farms do you have?

MR. McMAHON: I couldn't tell you that number, but it's a good number.

SENATOR JACKMAN: See, that is what I am talking about. You're talking, and you're telling me about the farmer going to spray a tree. Who is going to check it?

MR. McMAHON: Well, if it is done right, Senator--

SENATOR JACKMAN: How do you know it is done right?

MR. McMAHON: First of all, the individuals who do that work have to receive certification from the Department. If they don't do it right, they can lose that certification. That is a pretty big risk. That's usually a person's business. And we have done that. We have put people out of business. We pulled their licenses away and removed them from business, if they do not do the job right. So we think there is a significant risk to the individual -- to the person doing the application, driving him to do the job right. We can never observe every application of every pesticide.

SENATOR LESNIAK: Mr. McMahon, may I ask you a question specifically about the alternative language you suggest?

MR. McMAHON: Yes.

SENATOR LESNIAK: I am concerned with the placement of the words, "in accordance with departmental regulations." It would seem to me that that should go at the end. In other words, aren't you trying to say that in the case of mosquito control you can-- When the Department determines that no practical alternative is available, or in the case of other health or agricultural or environmental emergencies, in accordance with departmental regulations, etc., etc., grant an exemption.

My concern is, if you put "in accordance with departmental regulations," there could be other instances, other than mosquito control, health or agricultural or environmental emergencies, where you could authorize aerial spraying of broad spectrum pesticides, if the language is as written.

Are there any other types of emergencies, or-- Forget about emergencies.

MR. McMAHON: I don't know that we can predict--

SENATOR LESNIAK: Forget about emergencies. Are there any other types of circumstances where you would authorize by regulation an application of broad spectrum pesticides -- aerial application?

MR. McMAHON: I don't know that, Senator, and I don't know that we can be expected to delineate all of them in the bill here. What we are trying to do is give us the ability to make intelligent decisions, and to grant exceptions when exceptions are warranted, and not grant exceptions when they are not warranted. As it stands now, it would be very difficult to do that.

SENATOR LESNIAK: Okay. So you chose to put that there specifically for that. I just wanted to make sure.

MR. McMAHON: Yes, that is correct.

On page 6, section 8, notification requirements: The Department has, over the years, tightened its notification requirements step by step. We think we have moved in the right direction. I think if we take a step back for a second and look at why notification requirements, what are they for, and what do they accomplish-- I think, first of all, that you have to realize that the best way to deal with the problem -- for the need for notification, is to reduce the probability or the possibility that individuals might be exposed to pesticides. I think that over the years our regulations have been tightened and tightened and tightened and tightened and tightened, to the point where the probability that an individual will be exposed to pesticides inadvertently is becoming very, very limited.

But, it is not impossible. We can't say that there will never be anyone exposed to pesticides. One of the things that concerns us is the language that is in the bill that says: "All people who may be exposed--" That is so broad, to

require notification to all people who may be exposed. We don't really think that is possible -- that it is practicable even.

What we are suggesting, at this point in time, is-- We already have significant notification requirements. We recommend deleting this section, and adding some new language which I have provided to you. We believe that by adding the new language, we can, in fact, cover the area of notification more than adequately. We are-- Let's face it, most people don't want to be notified. They don't need to be notified; they don't want to be notified. We are now looking at some possible amendments to a regulation that would allow those individuals who would like to be notified to advise us. We will place them on a list, and that list can then be distributed to any applicator or any company that is doing pesticide applications, to make sure that they notify those individuals who have that concern.

But, as worded at this point in time, the bill is extremely broad, and we believe it would not be workable -- would not be practical.

SENATOR LESNIAK: Let me just--

MR. McMAHON: Sure.

SENATOR LESNIAK: I think the Department has done a good job in changing the regulations with regard to notification. I see that you recognize that we should have some legislative directive to you, because you folks may be gone at some point in time, and there may be someone replacing you who isn't as concerned about notification as you have been.

I don't see an awful lot of difference in the language you have suggested and the language that is in the bill. That is something that we can certainly work with you on.

MR. McMAHON: Okay. We appreciate that, Senator.

Page 6, section 9, the Gypsy Moth Permit Program: The Department believes it has the authority already for this section. We have no objection to it. However--

SENATOR JACKMAN: Page 6, section 9-- That's page 7, right?

MR. McMAHON: I have it listed on page 6, but--

SENATOR JACKMAN: In mine, it is on page 7.

MR. McMAHON: Page 7? I'll take your word for it.

SENATOR LESNIAK: Section 9, yes, is on page 7.

MR. McMAHON: Okay, I'm sorry.

SENATOR JACKMAN: That's okay.

MR. McMAHON: Again, we have no great problem with this, although we think it is unnecessary. The Department already has the authority to implement such a program, and we believe that such a program should be provided for in the regulations.

Page 7 -- it's really pages 7 and 8, sections 10, 11, 12, and 13-- Again, DEP currently has the lead, and currently has authority to handle -- to generally handle farm worker protection. The Department currently prepares pamphlets. Senator, here is an example of a pamphlet which is done in Spanish. We also do them in English and other languages. We currently have the authority to do these kinds of things, and we think we should continue to do them.

The way the bill is structured right now would transfer that responsibility over to the Department of Health. We would still have the primary regulatory responsibility in the pesticide area, and I see some significant duplication of efforts if we were to transfer that responsibility from us to DOH. A better way, we think, to handle this, would be to modify the language, and we have provided some there. Basically, it would require that DEP continue with its work in developing pamphlets, and training, and so on, but do that in consultation with the Department of Health. We agree with that. We think that is the appropriate way to handle this.

But to set up a separate section in the Department of Health is going to be costly, duplicative, and I think confusing to the overall industry and regulated community.

SENATOR LESNIAK: How does the Right to Know Law work vis-a-vis DEP and DOH?

MR. McMAHON: Right now, there is a Council -- combined DEP and DOH. The Department handles the community exposure. The Department of Health handles usually the in-house worker exposure.

SENATOR LESNIAK: Shouldn't this format be followed in this legislation as well? I mean, I think one of the things that everyone in good conscience recognizes is that farm workers should not be excluded from the Right to Know Law, which they were. Shouldn't we just follow that same format which we have working in that area?

MR. McMAHON: Well, I think we do follow that format in the Department. DEP does do the notifications, does provide the pamphlets. We have the existing authority to deal with these kinds of problems. It is not part of Right to Know. Maybe it should have been, but it's not. To move it over to the Department of Health, again, confuses the issue. DEP is the lead for pesticide enforcement. We have a strong enforcement program. I think separating this over to the Department of Health because they have something similar for other substances in other areas-- Again, I think it would duplicate the efforts already done with farms and with farm workers.

SENATOR JACKMAN: Mr. Chairman--

SENATOR LESNIAK: Yes.

SENATOR JACKMAN: --through you-- Are you recommending that the people who are going to have to deal with your Department -- and, let's not kid ourselves; you know there is a bureaucracy that is set up today in all of these departments-- Do you want them to deal with the Department of Health and DEP, or are you going to deal with the Department of Health and they deal only with you?

MR. McMAHON: That is what we are suggesting: Only deal with us, and we will deal with the Department of Health. Exactly. That is my point.

SENATOR JACKMAN: Yeah, because it is confusing enough to the average guy in the street.

MR. McMAHON: Exactly.

SENATOR JACKMAN: By the time he gets finished, he pays so many lawyers' fees that he is out of business. He sells his property. Right?

MR. McMAHON: I hope not. I hope not, Senator.

SENATOR JACKMAN: Okay.

MR. McMAHON: Okay. Page 9, section 14: The Department strongly supports the medical education and reporting sections.

Section 15: We support the communication provisions, although that is already in place. We already have good communications with the Department of Health. In fact, we met in preparation for this hearing. I don't think this is a necessary section.

The Department supports the refusal of entry and job protection provisions -- Sections 16 and 17 of the bill.

One section that gives us particular concern, is Section 18, which would provide for any citizen to sue the Department in a situation where that citizen felt that the Department was not carrying out its responsibilities. We find that to be counterproductive. It would seem to us that it would provide for frivolous suits. Individuals who feel the Department is not doing its job already have the Environmental Rights Act, under which they can take action against the Department, if the individual feels the Department is not doing its job.

To start putting in separate sections and separate bills that are going to be worded a little bit differently each time-- It would seem to us to add to the confusion of the

citizens' rights, rather than clarify the citizens' rights. So, we contend that the Environmental Rights Act already provides for this general kind of civil suits. It does provide limits, and we think those limits are reasonable. Therefore, we strongly oppose this particular provision.

SENATOR JACKMAN: Mr. Chairman?

SENATOR LESNIAK: Yes?

SENATOR JACKMAN: What's your answer?

SENATOR LESNIAK: What's my answer?

SENATOR JACKMAN: Yes.

SENATOR LESNIAK: I thought I was supposed to ask the questions, and they were supposed to answer the questions.

SENATOR JACKMAN: I know, but--

SENATOR LESNIAK: Well, I think the Environmental Rights Act needs strengthening, so maybe we can come to some agreement vis-a-vis that, and accomplish two birds with one stone.

MR. McMAHON: We agree. If that is the approach the Senate wants to move in, then let's do it as a unit, rather than all of the-- In DEQ, I have 18 environmental programs: pesticide, radiation, air, right to know, laboratory certification, emergency response--

SENATOR JACKMAN: Maybe you're overworked.

MR. McMAHON: To do this in each of our statutes-- I am overworked; I'll agree with you there.

SENATOR LESNIAK: He doesn't have ECRA anymore, so--

MR. McMAHON: I don't have ECRA anymore, you're right.

Okay. The last two sections-- The fee program, the Department strongly supports. And the enforcement and penalty provisions we agree with. I, personally, would kind of like to see the penalty provision go up to $50,000, for it to be consistent with the other environmental statutes. However, going from $3000, the existing, up to $25,000, is certainly a strong step in the right direction. We certainly don't want to oppose this.

SENATOR LESNIAK: I guess I'm just too soft on them.

MR. McMAHON: There are situations where a pesticide violation occurs, and it is a similar violation as to what might occur under the Spill Act, where we have a $50,000 penalty. So, there are situations where we may want to go to the higher $50,000 penalty. Now we will have to go to the Spill Act, rather than under the Pesticide Control Act. You know, we will still use our discretion and our good efforts to make sure that we are not under-penalizing or over-penalizing individuals for certain types of violations, but we will do that in accordance with our regulations.

We support the provision that would put the penalties in the Environmental Services Fund. We want to make sure that the Committee understands that there are some bills that are being -- that are in the Senate right now that would modify the penalty provisions generally. We want to make sure that these are consistent. We also want to remind you that in the current budget, which is a law, the excess penalties from the Pesticide Program go into the County Environmental Health Act. So, this is not consistent with the current budget. I think some provisions there need to be looked at to make them consistent.

SENATOR JACKMAN: That money is then utilized by the Department for what purpose?

MR. McMAHON: It wouldn't be used by the Department. It would be used by the counties. It would go into a pool of money that is then distributed to the counties to implement the County Environmental Health Act, including implementation of pesticide programs.

SENATOR JACKMAN: That is providing the companies didn't go into bankruptcy and go out of business and there is no money to get. Is that true, or isn't it?

SENATOR LESNIAK: Well, if there is no money, there's no money, Chris.

SENATOR JACKMAN: What?

SENATOR LESNIAK: If there's no money, there's no money.

SENATOR JACKMAN: That's what I am talking about.

MR. McMAHON: We are concerned about the dollar levels, the costs of this program. This is not going to be expensive. We estimate the total cost of this program to be something in the range of between $600,000 and $1 million -- to implement this program. That would probably more than double our fees for a product registration. Currently, our fee is $80 per product -- $80 per year per product. Last year-- One year ago, it was $40 per product. Under this bill, that cost would probably go up to the range of $150 to $200 per year per product. So we are really escalating the registration -- the fees in the program.

SENATOR LESNIAK: When you talk about the product-- Will you please explain what a product would be?

MR. McMAHON: Sure. Currently, any pesticide product that is used in the State of New Jersey must be registered with our State program. These registrations are things that can verify that the product is registered with the EPA; that is is a safe product. We get copies of the labels, which are then available to anyone who might need those labels. That registration currently is on an annual basis. There is a current $40 per product per year fee. Again, with the new bill, that would probably increase to the range of $150 to $200 per product.

When one considers most products distributed in the State for a year, that is a relatively small price to pay for the potential economic gains. We are concerned that there may be some limited-use products which will become not cost-effective. But I don't have a study. I can't point to one particular, or two particular products where this might be a problem.

SENATOR LESNIAK: I can't think of too many where a $150 registration fee would be burdensome.

MR. McMAHON: I don't think we disagree with you.

Gentlemen, I have provided written testimony. If you have any questions, or if I can provide you with further information later, please don't hesitate to ask.

SENATOR LESNIAK: Senator Cardinale?

SENATOR CARDINALE: I would like to get a handle on the dimensions of the problem that actually exists in the State of New Jersey, so I would like to ask you a few questions about that. If you don't have that information, perhaps you could get it to us later.

MR. McMAHON: Sure.

SENATOR CARDINALE: How many incidents of pesticide death in non-farm applications have occurred in New Jersey in the past year, two years, five years?

R A L P H C. S M I T H: Death? None.

MR. McMAHON: Death? I don't believe we have had any. In the last 10 years, I can remember--

MR. SMITH: Maybe one.

MR. McMAHON: Maybe one or two in the last 10 years.

SENATOR CARDINALE: How about in farm applications? In the last 10 years, you had one or two in non-farm applications?

MR. McMAHON: That is correct.

SENATOR CARDINALE: How about in farm applications -- general agricultural applications?

MR. McMAHON: I don't think we are aware of any death directly related to a pesticide application. That may be very difficult to ascertain, though, Senator.

SENATOR CARDINALE: None. In those deaths, were the pesticides applied by a licensed operator? You had a couple of deaths in the last 10 years. Were those caused by licensed people or by unlicensed people?

MR. McMAHON: In one case, the--

MR. SMITH: One was an individual who received a concentrated product from his exterminator, he put it into a milk bottle, the child drank it, and the child died. So, it was an unlicensed person.

SENATOR CARDINALE: So it was the kind of an incident that you couldn't hope to control by this bill?

MR. SMITH: Right.

MR. McMAHON: Could not be controlled by this bill.

SENATOR CARDINALE: In terms of serious injury, you know, not reaching death, how many incidents have you gotten over the last 10-year period?

MR. SMITH: It is very difficult to associate a particular injury -- a short-term effect, a short-term injury with an exposure to a pesticide. Typically, pesticide exposure can result in long-term types of illnesses, rather than in short-term incidents. I don't know that we can--

SENATOR CARDINALE: But, so much of this bill seems to be directed at incident-specific types of situations. You are going to hold hearings on whether or not a specific aerial application is going to be allowed. I mean, that is an incident specific kind of situation, and you haven't identified any incident specific serious injuries.

SENATOR LESNIAK: Senator, we have people, I think, who will be more able to answer those questions coming up to testify.

SENATOR CARDINALE: Sure, but this is the Department that is doing all the documentation under our present--

SENATOR LESNIAK: Well, this is one Department. We will hear from the Department of Health, we'll hear from--

SENATOR CARDINALE: All right, but before we let them go, we will ask the same questions.

SENATOR LESNIAK: You may ask any questions you want. I just--

SENATOR CARDINALE: Department of Health, you remember the questions.

SENATOR LESNIAK: --thought you may want to save some time by asking the people who have more specific information on this.

SENATOR CARDINALE: Well, I thought they were the people who were documenting, or giving the licenses -- you know, who are certifying people.

SENATOR LESNIAK: In terms of what?

SENATOR CARDINALE: In terms of licensed applications. And in terms of that, I think one of the most-- They have told us in their testimony that they have lifted people's licenses for violations, and I am going to get to that, too. I want to know what kinds of violations are occurring, because I think it is incumbent upon us to know the magnitude of the problem we are trying to deal with, so we can evaluate that against the magnitude of the problem which we created under this bill.

I understand that everything in life is a problem; that there is no such thing as a risk-free society. But in making an intelligent judgment, I think we need to know what the nature of the risk is, and that is what I am trying to--

SENATOR LESNIAK: I don't object to that.

SENATOR CARDINALE: You may know this already because you drafted the bill, but--

SENATOR LESNIAK: I just wanted to alert you to the fact that there are other people who may, in terms of specific instances of exposure, be able to enlighten you. But feel free to do what you wish.

SENATOR CARDINALE: Okay. Serious injury-- That is what we were up to. You say you had none. Tell me about--

MR. McMAHON: I said that I don't know that we can associate a particular application with a particular serious injury. There have been people who have been exposed to

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pesticides who have had rashes, who have had reactions, who have required medical attention. That is not a totally uncommon situation; it does occur. Luckily, not on a daily basis; luckily not frequently, but it does occur. I don't know that I can give you numbers. I can tell you that last year we had about 650 complaints from citizens, indicating that there was some problem when dealing with a pesticide applied in their--

SENATOR CARDINALE: You checked those 650 complaints, I suppose?

MR. McMAHON: Yes, we did, 100% of them.

SENATOR CARDINALE: How many of them did you find-- What were the findings as a result of those 650 checks you did?

MR. McMAHON: We issued a total of about 1000 administrative orders. There may have been multiple violations on a particular incident, but about 1000 orders, and we assessed about $125,000 -- $126,000 in penalties.

SENATOR CARDINALE: That is the kind of information I was looking for.

MR. McMAHON: Okay.

SENATOR CARDINALE: Could you describe just generally what some of those were like, at least the kinds of problems you had where people complained, you found that there was a basis, and then you issued some kind of an administrative order with respect to it?

MR. McMAHON: Sure. They go anywhere from a pesticide applicator coming in and quoting a job and offering to do an application, but not providing the label, which is part of the requirements, and not providing the proper documentation to the homeowner, which is required. The homeowner, in this case, probably would not have had the job done, or would have gone to a company that, in fact, gave him the full information that he needed and he is required to be provided with by law, to a more serious situation. We have had situations where bait traps are

left out and dogs or other animals ended up exposing themselves and ingesting the bait traps. We have situations where-- We had a situation last year where an application resulted in a municipality's whole water supply being contaminated, because the operator didn't follow the rules. When he was mixing his--

SENATOR CARDINALE: That was a licensed operator?

MR. McMAHON: That was a licensed operator. He didn't follow the rules. He failed to put in a back-flow check valve while he was mixing his pesticide. He hooked it up directly to a water supply, which he wasn't supposed to do. It turned out that there was a sudden drop in the water supply. The pesticide was sucked back into the system and, you know-- There was a situation where we didn't have injuries. We couldn't point to an individual dying. But we certainly should not be drinking pesticide.

SENATOR CARDINALE: Was he aware of it when it happened?

MR. McMAHON: Yes, he was aware of it. He reported it. He was penalized with our maximum penalty, in that case $3000. Actually, there were several violations. I think there was a total of $12,000 or $13,000 in penalties assessed. That company was suspended for a period of -- I think it was 30 days. So, fairly serious action was taken.

We had an aerial applicator who, over a two-year period, had sprayed pesticides beyond the area where they were to have been sprayed and, in fact, school children waiting for buses were sprayed. Now this was before we revised the regulation which tightened and made that much more difficult to happen. He also applied it over a park, where there were picnics going on. That was a situation where, in fact, we eventually revoked his operating certificate, and put him out of business. There was a negotiated settlement, and basically he voluntarily gave up his license for life, paid the penalty, and so on.

So, there is a broad spectrum of violations and situations which do occur. It is real.

SENATOR CARDINALE: Thank you.

SENATOR LESNIAK: Thank you, Senator. Thank you, Mr. McMahon and Mr. Smith. Thank you very much for your testimony.

Dr. Richard Fenske, from Rutgers University.

D R. R I C H A R D A. F E N S K E: Good morning. I want to thank the Committee for inviting me to attend this hearing, to give some comments regarding the public health importance of pesticide exposure.

I am an Assistant Professor at the Department of Environmental Sciences at Rutgers University, and part of the New Jersey Agricultural Experiment Station, and also a faculty member in the graduate program in public health at Rutgers. I have conducted scientific studies of human exposure to pesticides for the past 10 years. This research has been supported by a number of sources, including the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, the National Institute of Occupational Safety and Health, the Canadian government, New Jersey DEP, and the National Agricultural Chemicals Association.

I am currently the Chair of the New Jersey Department of Environmental Protection Pesticide Review Committee, which is very similar in structure to the proposed Technical Advisory Committee in the legislation which we are discussing. I also served as a technical adviser for U.S. EPA during its negotiated rule-making procedure for farm worker protection standards in 1985 and 1986.

What I really would like to do today is give some general comments about pesticide exposure, toxicity, and the need for surveillance of pesticide related illnesses. I will try to make my comments relatively brief.

Of great importance to me is that in proposing a piece of legislation like this, we try to have as sound a basis in

our scientific knowledge of pesticide exposure and health effects as we possibly can, and there are a number of my colleagues at Rutgers and the Robert Wood Johnson Medical School who work in this area and are currently doing research on pesticide health effects.

I think it is important to point out that we, all of us, are exposed to pesticides everyday in the normal routine of our lives; that many of the foods we eat contain very low levels of pesticides, within legal limits, but still they're there; and also the air we breathe inside our homes may well have pesticides in it. The U.S. EPA recently conducted a random sampling of homes in two major United States cities, and found measurable pesticides in the indoor air of virtually all of these homes. Once pesticides have been used inside of a home, it is very likely that some, albeit small, residue can be found in those homes. I think it is important to understand kind of the baseline that we experience -- that we are exposed to pesticides.

The question, of course, is, are such exposures of public health significance or not? I think it is only safe to say that some probably are; some certainly are not; and in most cases, we have an enormous amount of scientific uncertainty to face in this area. It is very difficult to assign health risks to some of these exposures.

In this bill, there are several points at which the term, "exposure to a pesticide" is used, but that term is never defined. From my own research, and from that of other people in this field, I can offer a working definition of what exposure to a pesticide is. I would call it the amount of the pesticide which reaches the body and is available to absorption through the skin, the gastrointestinal tract, or the respiratory system, over some time period. Well, that means that reduced to its simplest form, exposure can be said to have occurred if any amount of pesticide can be measured in an

individual's environment. That means that exposure has occurred, basically, if it can be detected.

So, if I have a very sensitive method of detecting pesticides, I may be able to show that someone has been exposed, whereas another scientist may not be able to do that. This is a definition that is independent of health significance. I think as an operational definition in scientific research, it has proved very useful. But it only becomes meaningful in a public health context when it is linked to toxicological or epidemiological data.

I think we have to be frank and admit that we have a lot to learn about the health effects of pesticides. First of all, we are talking about a wide variety of compounds that have very different modes and mechanisms -- toxic mechanisms -- and we are also talking about both acute and chronic toxicity at the same time, often interchangeably, and that really should not be the case. The kinds of acute problems that we deal with in terms of pesticide exposure tend to be either intoxications, where someone actually feels ill and reports to a doctor, or problems associated with the skin or the eyes -- irritant or dermatitis types of problems. Those are the major categories of acute toxicity.

Dealing with chronic toxicity is much more difficult. We have on the market, registered by U.S. EPA, a number of compounds that the U.S. EPA itself considers to be possible or probable cancer-causing agents. These are in current use. To what extent does exposure to these compounds result in a health risk to either a worker population or the public, is very, very difficult to say at this point. That, of course, is what EPA spends much of its time doing, and certainly the New Jersey DEP attempts to go through that same exercise which we call "risk assessment." I am not going to go into that, only to say that we always make a lot of assumptions, and we all know that these assessments contain a great deal of uncertainty.

What I would like to emphasize here, is that there are some basic differences that we can talk about in terms of exposures to pesticides, the magnitude of those exposures. If I try to measure exposure at a residence near an application site, but not the site itself, I would probably be measuring exposures in micrograms or even nanograms of pesticides per hour of exposure. A microgram is one/one-millionth of a gram, and a nanogram is one/one-billionth of a gram of this pesticide -- very, very small, almost what we would call "trace amounts." We have the instrumentation to measure those levels easily.

This exposure would probably occur over a relatively short period of time. If there were an aerial application that resulted in some drift, we might be able to measure pesticides in the air in the backyard of a home for one hour, maybe only 15 minutes, maybe a couple of hours, and then that exposure would no longer exist.

In contrast, farm workers entering treated fields under proper reentry procedures are likely to receive exposures in the range of milligrams of pesticide per hour, whether it be through the respiratory route or on the skin; that is, milligrams being one/one-thousandth of a gram.

Now, nonoccupational exposures to pesticides may be important for certain susceptible populations. People with allergies or with special health effects, children, and women in pregnancy are obvious examples of that. Even small exposures under those circumstances may be of public health concern. But it is clear that in general, farm workers face orders of magnitude -- higher levels of exposure. That is an important point to realize, that we are really talking about maybe 1000, maybe a million times difference in terms of the magnitudes of exposures of two different populations which are addressed in this legislation.

Just to emphasize this point, it is normally assumed that mixers and applicators of pesticides receive the highest exposures among agricultural workers. While it is true that the potential for an acute incident -- say, an accident -- is relatively high in the mixers and applicators, the cumulative exposures received during harvesting and other hand labor activities can equal, or exceed mixer/applicator exposures, although few studies have attempted to actually draw this comparison. A recent study conducted by TNO Medical Biological Laboratories in the Netherlands, concluded that harvesters of cut flowers in greenhouses received higher weekly exposures than the person who did the pesticide applications.

So there is substantial evidence to suggest that farmer group exposure to pesticides may pose some health risks. Some of those risks are going to be very difficult to define, if we are talking about chronic health effects from long-term, low-level exposure to pesticides, much less dramatic than the kinds of acute episodes that may occur.

The notion that individuals should be aware of health risks resulting from work is now generally accepted, I think, and the notion that farm workers should be included in this, I think, is self-evident. It is well-documented that agriculture is one of the more hazardous occupations from either a safety point of view -- that is, frequency of injury -- or a health point of view -- frequency of illness. So it seems appropriate that hazard communication regarding pesticide exposure become just a necessary aspect of doing business in the pesticide application profession.

But it should be kept in mind, in terms of farmers, that most farmers in New Jersey are primarily cultivators of land. Pesticide use represents only one component of a rather complex commercial enterprise, and farmers are not specialists in hazard communication. So I think the policies and procedures developed to create effective hazard communication

have to balance the needs of farm workers and the abilities of farmers to do this kind of job. I am certain that much of the testimony we will hear today will be an attempt to clarify exactly the details of how that kind of balance can be achieved.

The only other point I want to speak to in this bill is really the issue of the diagnosis and reporting of pesticide related illnesses. I would point out for the Committee's information that in -- I guess it is section 14-- In section 14, in two cases, the term, "incidents of pesticide exposure" is used, referring to medical problems. I would suggest that the term, "pesticide related illness" be substituted there, because a pesticide exposure may or may not result in an illness. We can certainly have trivial pesticide exposures. I think what is meant there is someone coming to a physician with a problem.

In any case, I think this is one of the most important components of the legislation, developing a medical education program and a reporting system. I might point out, in reference to the questions that were raised previously concerning the number of problems, serious illnesses or injuries resulting from pesticides, that this State does not have a formal reporting system, as do some other states in this country. It is very difficult for the Department of Health or the Department of Environmental Protection to actually tell anyone how many incidents were reported, since there is no systematic collection of this kind of information, in contrast, say, to a state like California. In fact, mandatory reporting of pesticide related illnesses by physicians has been a part of California law for more than a decade, and has allowed the state to determine the prevalence of particular illnesses. It certainly helps them to identify epidemics, that is outbreaks of clusters of these illnesses, and it also has allowed them to identify specific compounds or use patterns which seem to cause a disproportionate number of illnesses.

This kind of information is a very important feedback for regulatory decisions, I think. This type of reporting system is clearly dependent on the diagnostic expertise of physicians, or other clinicians in regions with high pesticide use. So a program designed to educate physicians is really a prerequisite to having a good reporting system. These points, I think, are covered very well in the bill. I think that is certainly something that would add to our understanding of the magnitude of the problem, and how we are going to deal with this problem. It has proven to be a successful program in other states.

I think I will stop here with my testimony.

SENATOR LESNIAK: Senator Jackman?

SENATOR JACKMAN: What has been your experience with-- I only read yesterday, or a couple of days ago-- When people go into the farms and handpick their own fruit-- Handpick: You walk in, pick your own fruit, and put it in a basket. Who tests them?

DR. FENSKE: No one.

SENATOR JACKMAN: Nobody?

DR. FENSKE: No. But I can assure you that they are getting some pesticide exposure.

SENATOR JACKMAN: Can anyone give me any real documentation on how many people now, today, in this State of New Jersey, have been affected by pesticides, where they are in a hospital, or are being taken care of by a doctor? Does anyone have any documentation relating to that -- either the Department of Environmental Protection or the Department of Health?

DR. FENSKE: Certain cases may come to the attention of those agencies, but there is no systematic system for collecting that information.

SENATOR JACKMAN: Nothing? So, in other words we are talking-- What we are doing here is talking in general terms.

No disrespect now, because I know your reputation. I know your background and I know the kind of work you're doing. But it is frightening to us who sit here, talking in terms of making legislation, not knowing what is really taking place on the farms around this State, number one. And number two, why are the farmers shutting the farms down and going out of business? Are we regulating them to the point that it doesn't pay to be a farmer? Shut it down, and get the hell out, because you've got a $30,000 or a $50,000 fine staring you in the face. What is the answer going to be? That is what I want to know about. That is the thing that I get frightened about.

SENATOR LESNIAK: I'll tell you what the answer can't be.

SENATOR JACKMAN: What?

SENATOR LESNIAK: I'll tell you what the answer can't be. The answer can't be that we take away the advice to farm workers that we give to every other worker.

SENATOR JACKMAN: No, no, I'm not saying that. What I am trying to say is-- We're talking about the rights of everybody. The farm workers have rights. No question about it. Yet, here--

SENATOR LESNIAK: Not under our laws, Chris; not under our laws. We have excluded them.

SENATOR JACKMAN: With your approval, Mr. Chairman, what happens when I see a big sign on a farm, "Come and pick your own basket of fruit"? The guy goes in, and he is picking the same fruit that a farm worker would be picking.

SENATOR LESNIAK: Not 10, 12 hours a day, day in and day out.

SENATOR JACKMAN: May I ask you something?

SENATOR LESNIAK: Sure.

SENATOR JACKMAN: If I am going to go into a farm and pick off the fruit, and there is pesticide on that fruit, and I don't know about it and I don't take the proper precautions,

and I am affected by it -- I can be affected by it-- Nobody knows if that person is affected, do they, because there is no documentation?

SENATOR LESNIAK: I guess the point here is that the exposure has a lot to do with how long you are exposed to it as well. Someone who works in that field for-- If you go to pick your own strawberries for 15 minutes, that is really not comparable to a farm worker picking strawberries for five days in a field that has been treated. There is just no comparison.

SENATOR JACKMAN: Okay. That's a good statement. I just wonder -- with your permission again-- I know people -- don't anyone laugh when I say this -- who use their own roach powder to spray around their homes because they have roaches. They spray it and they spray it and they spray it, and they inhale it. Is that a pesticide?

DR. FENSKE: Yes.

SENATOR JACKMAN: It is? Okay. There are no protective measures for them, are there?

DR. FENSKE: First of all, that is a self-imposed risk, and there is education to alert people. But we certainly don't regulate to that extent.

SENATOR JACKMAN: Okay, good. Thank you.

SENATOR LESNIAK: Senator Cardinale?

SENATOR CARDINALE: I don't have any other questions, except to comment that I really appreciated your testimony, particularly the area where you said we need to get the information that they are getting in California, so that we can know what it is that we ought to be regulating. I thank you very much for that testimony.

SENATOR LESNIAK: Thank you, Senator. Thank you, Dr. Fenske.

From the Department of Health, Dr. Thomas Burke and Dr. Christopher Milne.

D E P U T Y C O M M. T H O M A S B U R K E: Thank you, Mr. Chairman. I am Dr. Tom Burke, Deputy Commissioner of Health. I have with me Chris Milne, who is our pesticide coordinator. I have submitted written testimony and, in the interest of time, I would like to just go quickly through it.

We are very happy to be here today to testify in support of this bill. I think the sponsor and the Department have worked for a long time to try to improve communication about pesticides. As we have heard today, there are a lot of informational gaps on reporting that we think this bill will address. In general, this bill very much strengthens our ability to address the issues of pesticides in New Jersey as the Department of Health.

Because it is such a complex issue and involves many departments and many other aspects, I would like to just address those components that are specific to the Health Department. We support sections 1 through 3, which deal with the expansion of the Pesticide Council. Obviously, we think that on an issue like this you need as broad a representation as possible. There are many issues, and I think that can only improve the way that we manage pesticides.

Section 4 formally creates a Pesticide Technical Advisory Committee, which again we support. State technical capabilities alone just can't manage the broad issue of pesticides. Once again, we feel that this will enable us to be in touch with current information, technical and scientific state-of-the-art information, which will, again, improve our ability within State government to make intelligent decisions about pesticide management.

I know you heard a little bit about section 11 from Tony McMahon, asking that the Department of Health, as is now designated in the bill, not prepare pamphlets to farm workers. As you correctly pointed out, Mr. Chairman, currently the Department of Health prepares the Right to Know Fact Sheets and

the education material there. We support the continuation of that model -- the Right to Know model -- for information exchange. But we understand that there has to be flexibility, and we don't want to create a more burdensome bureaucracy. However, we certainly think there is a mechanism under Right to Know for the Health Department to prepare that information. Also, the Health Department, being nonregulatory, I think has a certain perspective that is important in providing health related information.

Section 13 requires certification of trainers. Again, we think this is important. There is the Community and Worker Right to Know model for that. We want to have some measure of quality control over the kind of training that is taking place. We also have broad experience in the Health Department with providing this kind of training for the State's asbestos workers. I think these programs have been recognized nationally as models. Again, we support this, and support the development of that capability within the Department.

As you have heard, there are a lot of questions about illnesses and reporting. Probably from our perspective, section 14, on page 8, may be our most important function under the bill, which mandates us to carry out three specific activities: to identify and train health care providers for farm workers in pesticide exposure management. The second is a program to alert physicians and other health professionals concerning the symptoms, diagnosis, and treatment of pesticide poisonings. And finally, the Department must establish a mechanism for physician and veterinarian reporting of incidents. I think a lot of what you are asking today, we don't have that information for, simply because we do not have that. This obviously would strengthen our abilities.

We have heard that there is a need for this kind of education and training from many aspects, particularly our local health officers. We think this must contain a mechanism

for the prompt identification of chemicals or practices which are resulting in harmful exposures or illnesses.

Section 15, page 9, mandates a sharing of pesticide incident reports between the Departments. We feel, once again, that this will strengthen our ability to track and follow-up on pesticide exposures. There is a mechanism now for the sharing of information, but I think the legislation will strengthen that, and we support it.

Touched on briefly was section 18, which is the right for any person to bring a civil action against DEP or the Department of Health. Since clearly we don't have regulatory authority under this, we are a little concerned about that. We would work with you on that, or whatever, but we are trying to interpret just how that would affect us, since our role is mainly surveillance and education. With all due respect, we request that perhaps that language be revisited.

The final thing I would like to ask is, as you, Mr. Sponsor, have done before in the amendments to the Safe Drinking Water Act, and other legislation we have worked on together-- We need a mechanism to have the appropriate manpower within the Department. Currently, that does not exist. We have very little ability to provide these kinds of services. Through whatever mechanism, we would like to work with you to make sure that that is appropriate; that not only do we have the commitments to performing these services -- surveillance and education -- but we have the mechanisms to do those.

That is the extent of our testimony. Once again, we think this very much strengthens the Department of Health's ability to address the issue of pesticides. We support the bill. We applaud you for your efforts.

If I may answer just one question: We have attempted to try to find out, through our hospital admissions data, just how many instances of poisonings we have a year. Over the past

several years, it appears to be about 100 per year occupationally related pesticide poisonings which require hospital attention. But once again, I would have to say that this may be the tip of the iceberg, or it may be more than that, but we don't have the firm mechanism that this bill would provide us with. But clearly, there are a number of people each year in New Jersey seeking hospital care for pesticide poisoning.

SENATOR LESNIAK: Thank you, Doctor. Before we have questions from the other Senators, I would like to read the last paragraph of your testimony directly into the record: "Pesticides are, at the present time, an integral part of farming, a difficult and often dangerous profession. Both those who use them and those who benefit from them must be informed of their risks. While the annual death rate for all industries combined is 11 per 100,000, that for agriculture is five times as high. While agricultural workers have a low-to-normal mortality for all cancers combined, they have consistent excesses of hematologic cancers, including leukemia, Hodgkin's disease, non-Hodgkin's lymphoma, and multiple myeloma. Farming could be considered the first and most revered industry of the Garden State. The Department of Health believes that by working with other State agencies and farming interests, it can be our safest industry as well."

SENATOR JACKMAN: That's a good statement.

SENATOR LESNIAK: I just wanted to adopt that statement as my own as well.

DEPUTY COMMISSIONER BURKE: Thank you.

SENATOR LESNIAK: I certainly couldn't have said it any better. Senator Jackman?

SENATOR JACKMAN: I think their report was very well put. There is only one question that got me a little frustrated. I noticed it said: "Since the Department of Health has no enforcement powers--" What do you mean you have no enforcement powers?

DEPUTY COMMISSIONER BURKE: As is currently spelled out, the Department of Environmental Protection is the primary regulatory agency in this State for pesticide control. We are an advice and surveillance and complementary role, but we do not enforce. We cannot take action against misapplication or violation.

SENATOR JACKMAN: But you make the recommendations for them to enforce. Is that what you're telling me?

DEPUTY COMMISSIONER BURKE: Yes, through our current role in an advisory capacity.

SENATOR JACKMAN: Okay.

SENATOR LESNIAK: Senator Cardinale?

SENATOR CARDINALE: I am a little confused with part of what Senator Lesniak read. The annual death rate for all industries combined is 11 per 100,000. That is the annual death rate from pesticides?

DEPUTY COMMISSIONER BURKE: No.

SENATOR CARDINALE: What is that?

D R. C H R I S T O P H E R - P A U L M I L N E: That is just comparing the risk of being an agricultural worker to the risk of being some other kind of worker -- whatever other industry you might consider it to be.

SENATOR CARDINALE: Risk from what?

DEPUTY COMMISSIONER BURKE: For 100,000 workers in all other lines of work.

SENATOR CARDINALE: From what cause?

DEPUTY COMMISSIONER BURKE: Work related mortalities.

SENATOR CARDINALE: So that could be somebody who gets run over by a lawnmower?

DEPUTY COMMISSIONER BURKE: Yes, correct.

SENATOR CARDINALE: I mean, you aren't talking about businesses.

DR. MILNE: It could be a wide range of injuries. There is more specific information on pesticides in that risk.

DEPUTY COMMISSIONER BURKE: Clearly, the physical hazards--

SENATOR CARDINALE: What prompted that question was obviously the fact that the Department of Environmental Protection could identify no deaths from pesticides, and you seem to be identifying 11 per 100,000.

DEPUTY COMMISSIONER BURKE: Let me clarify that: Agriculture is a risky business, primarily because of machinery and those kinds of things. We didn't mean to infer that these were totally pesticide related deaths.

SENATOR LESNIAK: Nor did I in adopting the statement. What I meant from my point of view was, one of the most outrageous things that we, as a Legislature -- and the Governor along with us -- did was exempt farm workers from the Right to Know Law, because that industry, in general, is more hazardous than other industries, and their exposures are greater than other industries. We know that as well, although we haven't documented that testimony, but we certainly will. For us, as a public policy of the State, to exclude them, is nothing more than unbelievable discrimination on their part, because they don't have a constituency. Many of them are migrant workers. They work incredible hours, an incredible number of days, and at hard, strenuous labor. We bear the fruits of their labor, and yet they don't have the basic protections that other workers have in this State. That was my point in adopting that statement.

Senator Jackman?

SENATOR JACKMAN: Mr. Chairman, I want to just make a statement for the edification of the people in the room: Number one, I want to compliment you, because I know you have tried very hard to put together the type of bill that would be helpful, in conjunction with our colleagues on both sides of the aisle.

The thing that frightens me, of course, is one of the statements you made before about the Right to Know. I think

you hit the nail on the head. I think anyone who is working on any job should have the right to know what kind of machinery he is working on, and what kind of atmosphere he is going to be working in.

Do we have any documentation on how many people die from carbon monoxide waiting, you know, to get through the Lincoln Tunnel or the Holland Tunnel, or anything like that? (laughter) I'm serious. People laugh when you talk about carbon monoxide, but I venture to say that maybe more people die from carbon monoxide that they do from pesticides.

DEPUTY COMMISSIONER BURKE: And a lot more get sick.

MR. DAVIS (Committee Aide): They ought to knock down those tolls.

SENATOR CARDINALE: At the toll booths, that was what I was going to say -- right at the toll booths. (applause)

SENATOR LESNIAK: I don't know what the applause was for, but all right. Thank you.

DEPUTY COMMISSIONER BURKE: Thank you, Mr. Chairman.

SENATOR LESNIAK: Thank you very much, Doctors, for your testimony.

SENATOR JACKMAN: Thank you very much. Take care.

SENATOR LESNIAK: Mark Lyons, from CATA. Since this is primarily a labor bill, that is why it is in this Committee.

SENATOR CARDINALE: Oh, is that what it is? I couldn't understand why it wasn't in Health.

M A R K L Y O N S: Mr. Chairman, I am Mark Lyons. I am the Health and Safety Coordinator for CATA, which is a Spanish acronym for the Farm Workers Support Committee. We are an organization which has advocated for farm workers. Most of us are farm workers, or have been farm workers in our past lives. We have been working in southern New Jersey for the last 10 years.

What I would like to do is present a panel which includes myself. I would like to address some of the issues

which have been raised, one about whether this really is a problem, and our perspective about that. Then finally what I would like to do is present two farm workers to present their perspective, which is that of people who work in the fields all day, up to 10 hours a day, six days a week, six months of the year, because I think the perspective of the people who work with pesticides is probably one of the most important parts of this testimony.

Dr. Fenske has discussed the health effects of pesticide exposure, and how the work that farm workers do puts them at risk to be exposed to pesticides. One of the consistent arguments we have heard against this bill is that it is not necessary; that there really is no problem in New Jersey with farm workers being dangerously exposed to pesticides. Opponents of this Pesticide Right to Know Bill cite the lack of formal complaints made by farm workers to DEP and the relative small number of farm workers who show up at health clinics complaining of pesticide related illnesses. These opponents argue that Senate Bill No. 3741 imposes yet another set of bureaucratic hoops for farm operators to jump through, while addressing a problem which is really nonexistent.

Today, I would like to address the issue of whether farm worker exposure to pesticides is a problem in New Jersey by doing several things: First, I would like to discuss studies done in New Jersey related to farm worker exposure to pesticides. Secondly, I would like to discuss what we have learned while doing pesticide educational programs in the camps of farms in southern New Jersey. Third, I would like to address the issue of under-reporting and why I think that what we are seeing is really just the tip of the iceberg, and maybe just some fumes above the iceberg. And finally, I would like to introduce two farm workers who will discuss their experiences, as I said.

The problem in New Jersey: In 1983, 1984, and 1985, Sa-Lantic Health Services -- which is a migrant health center in Hammonton, New Jersey -- did studies of pesticide exposure amongst New Jersey farm workers. In 1983, this one migrant health center found 24 documented cases of suspected pesticide related illness. Thirty-nine cases were identified in this one clinic in 1984, and 34 more cases were identified in 1985. This is in one clinic, mind you. In 1988, the New Jersey Department of Health did some studies of their own, trying to develop -- seeing if it was reasonable to try to develop a reporting system. As part of that, working with emergency rooms in six hospitals in southern New Jersey and the two major migrant health centers, the Department of Health, in 1988, identified 36 cases of pesticide related illness amongst farm workers.

I remind you that these cases were only identified amongst farm workers who came to the clinic because they were sick. Furthermore, the Sa-Lantic Health Services, in '83 and '84, as part of their pesticide study, did formal interviews of over 60 farm workers. It was determined that one-third of the workers they surveyed in these interviews had been sprayed while working in the fields. Of those farm workers, half of them had been sprayed within the last year -- or during the current season, really. About half of those workers who were sprayed said that they had gotten sick and developed some kinds of acute symptoms, but only 25% of the farm workers who got sick said they went to the clinic for health care.

If only 25% of the farm workers who develop pesticide illness go for treatment, then a conservative estimate would be that there were at least 144 cases of pesticide related illness in New Jersey last year amongst the New Jersey farm workers. That is basically four times the amount of the 36 cases identified by the Department of Health.

I would like to talk a little bit about our experience doing pesticide education with the farm workers of New Jersey. Over the last two years, CATA has hired and trained farm workers as health educators, who go to the camps of farms in New Jersey and do educational programs concerning pesticides. These programs, by the way, last between an hour-and-15-minutes and an hour-and-a-half, and cover basically the same topics that are recommended in the proposed regulations. We would certainly be happy to share the training that we have developed in our experience with the Department of Health.

In the last year, we have held over 40 meetings concerning pesticides. I would like to state what we have learned from farm workers while doing these programs, because I think it is very important in terms of understanding what it is like to work with pesticides.

First, farm workers have a vague understanding of the hazards of pesticides. They are aware that there are acute problems; that if you have a high exposure, you can have problems with respiration, vomiting, and that kind of thing. But practically no farm workers are aware of the chronic effects of pesticide exposure over long periods, such as cancer, infertility, birth defects, or nervous disorders such as loss of memory.

Secondly, we found that farm workers know that dramatic events such as being directly sprayed are dangerous, or when mixers and applicators spill liquids, but few understand the dangers of low-grade exposure to pesticide residues -- the dusts that are left after the pesticide dries on the plants -- which is much more common, and which is much more apt to produce chronic problems where the farm worker doesn't develop as acute symptoms when exposed.

Third, few farm workers really know all the symptoms of pesticide exposure. Many of the symptoms, such as diarrhea, vomiting, nausea, weakness, fatique, headaches, problems with

your vision-- Those are all symptoms that are very common and they are related to a whole lot of other kinds of diseases, such as the flu. Also, obviously if you have worked all day in the field at 95 degree heat for 10 hours, you are going to be tired. While they have these symptoms they assume they probably have a virus, rather than consider the possibility that the symptoms they have developed are related to pesticide exposure. Thus, they do not seek help.

Fourth, because they don't really understand, for the most part, the role of the residues in pesticide poisoning, farm workers frequently do not wear appropriate clothing or wash their hands before eating, drinking, smoking, or going to the bathroom.

Fifth, we have found that most farm workers don't know appropriate first aid in case of a pesticide incident. They do not know the symptoms of severe poisoning which require immediate medical treatment, which are truly an emergency, and they often don't know where to go in their communities for medical treatment.

Sixth, farm workers are not aware of the laws established to protect them from pesticides, such as the regulations of the New Jersey Department of Environmental Protection or the field sanitation regulations. Furthermore, they do not know how to use these laws, meaning they don't know what the mechanism is for filing a complaint and requesting an inspection if they think there is a problem on their farm.

Finally, farm workers, most of whom are migrants, as has been said, come here to work as hard and as long as they can, in order to save more money for their families to live on for the rest of the year. That is their main priority. Thus they will only go for health care if they are very sick. They are terrified of losing their job if they file a formal complaint against the farm operator. They don't know, for the most part, that their name as a complainant must by law be kept confidential, and should not be revealed to the farm operator.

What we have learned during these programs underscores three important things: First, there is a tremendous need by farm workers to receive basic information concerning pesticides, the hazards, the symptoms of poisoning, how to protect themselves in the field, first aid, and how to use the laws designed to protect their health. Second, there is also a tremendous hunger on the part of farm workers to obtain this information and to begin to use it. Finally, it is clear that if we rely on health provider visits or complaints to DEP to determine the scope of the pesticide problem, there will be tremendous underreporting. Farm workers often do not recognize the symptoms as pesticide related. They only go to the doctor if they are very sick. They don't know what their rights are under the laws, or how to use their laws, and they are afraid of filing a complaint and risking the loss of their job.

To summarize, the farm workers of New Jersey are at risk to dangerous exposure to pesticides. I don't think any of us have any questions about that. They are working with some of the most toxic chemicals produced, which are specifically produced to kill living beings and, in fact, have some of the same kinds of toxic effects on human beings that they have on pests.

Like all workers, farm workers should have the right to know what toxic chemicals they are being exposed to and how to protect themselves; also, to learn how they may exercise their rights under the law.

If there are no questions, I would like to introduce two farm workers, who will testify about their experience. I will translate for them.

SENATOR LESNIAK: Senator Jackman, are there any questions at this time?

SENATOR JACKMAN: No.

SENATOR LESNIAK: Senator Cardinale?

SENATOR CARDINALE: No. I'll hold them for now.

MR. LYONS: Okay. I am going to translate for someone who would prefer, because of the hearing being public, that his name not be used -- for reasons that may become clear. Okay.

(Witness starts to testify in Spanish at this point, and Mr. Lyons translates):

Good day. For me it is a pleasure to have the opportunity to be here with you today, and to talk about some of the bad things that happen on farms -- to farm workers when we do not understand our rights.

I was working this past year on a farm on Route 322 in southern New Jersey, on a farm that was owned by Senator Haines.

SENATOR LESNIAK: Just a second, just a second. Time out. I don't object, but what my problem here is-- He objects to revealing his name, but he reveals someone else's name. This is not an inquisitive body vis-a-vis any specific incident to find fault with any specific person. It is a legislative body, and it has nothing to do with whether it is a Senator or not. It's a legislative body to deal with overall effects. I am not here to lay blame on any particular individual, or to exonerate him, with regard to this, because I am sure Senator Cardinale, if not myself, is going to question the person testifying regarding the incident to make sure it is fairly presented.

Because of that, I am going to have to rule that his testimony is out of order. Would you like to--

SENATOR JACKMAN: The other thing, the disadvantage -- and I am not being facetious when I say this-- Because we don't understand his language -- and again, I am not being disrespectful -- we are depending on you to tell us what he is saying, and I don't know if you are telling us what he is saying.

SENATOR LESNIAK: Well, I believe Mr. Lyons.

SENATOR JACKMAN: I get a little worried. I would prefer your telling me what he means. I would prefer your telling me.

SENATOR LESNIAK: Senator, that is not the issue. Mr. Lyons, please--

MR. LYONS: But, see, I think it is really important that farm workers be able to speak in their own words.

SENATOR LESNIAK: That is not the issue. I believe that your translation would be accurate. May we hear testimony from the other farm worker?

MR. LYONS: Wait a minute. Because I have read the rest of his testimony, I will have to say that this testimony -- the purpose of this testimony is not to indict Senator Haines. You know, the fact that we mentioned the name, and in this testimony also the name of the farm-- I thought it would be useful, when reviewing this with the farm workers about what information we would give you, not to make it abstract, not to say, "Well, I worked on a farm." If you would prefer us not to use names-- The purpose of this is not to indict one particular farm owner. The purpose of this is to talk about the experience of a farm worker.

I think it is unfair, because he happened to mention the name of one person, to say that you won't hear the rest of his testimony.

SENATOR LESNIAK: The problem is -- and I know the press better than anybody -- that is what the issue is going to be, not the incident and what happened and what laws should be changed with regard to it. I just prefer not to go into that area.

SENATOR CARDINALE: I would like to add something, if I may. You are fully aware of what it is that they are going to say, and the points they are going to try to present to the Committee. I think those points could be presented to this Committee by you. If they are presented by them, in a manner that we can understand, I think there would be a purpose to separate testimony. But it doesn't strike me as at all important that they read it in one language, and then you tell

us in another language. I have an objection very similar to Senator Jackman's, but let me put it a slightly different way:

There is a difference in emphasis, and that is why you brought them, because there is a difference in seeing someone who has personally experienced something, than there is in having someone tell about it as a third party to the incident. But, in fact, what we are getting is a third party presentation, because--

MR. LYONS: I'm sorry. These are his words that I happen to be translating.

SENATOR CARDINALE: I think you could read them, or you could submit them to the Committee and we could have them translated. But I really see no point to having him tell us his problem and then having it come through you, because it dilutes it, at the very least. It is unfair to your side of the case, as much as it is unfair because Senator Jackman, or perhaps myself, might feel that the emphasis might be changed through the interpretation. Perhaps his words should be given to us in his own language, and just left here for us to translate. I am sure we can arrange to have a translation done.

SENATOR LESNIAK: Well, let me just say, I don't have-- That is not my objection. However, I do not want to get into whether this specific incident occurred, or didn't occur. I think that would dilute what we are trying to do today. If any Senator wants to read the testimony, they certainly may.

I am going to have to call the next witness. Thank you very much for coming.

MR. LYONS: So, you're saying that you are not going to allow either farm worker to testify?

SENATOR LESNIAK: Unless they want to talk about other instances. I can't get involved in specific--

MR. LYONS: This person will not be talking about the incident on Senator Haines' farm.

SENATOR LESNIAK: Fine, then he is welcome to testify, and you are welcome to translate. I thought you said that both would be--

MR. LYONS: No. Part of our discussion was that we wanted to talk about something that had occurred on a large farm, and something that had occurred on a small farm, to show that this isn't a problem of big farms or little farms.

SENATOR LESNIAK: Then I misunderstood you, because I thought you said they were both here to talk about the same thing.

MR. LYONS: No, this has to do with a whole different situation.

SENATOR LESNIAK: Oh, then absolutely, I will hear the other person. Go right ahead, please.

MR. LYONS: Would you prefer that this farm owner's name not be mentioned?

SENATOR LESNIAK: Yes, because I really don't want to have to bring that farm owner in.

MR. LYONS: That's fine, okay. Our purpose is not to indict. I want to make that clear. I think there is some important--

SENATOR LESNIAK: This is not an investigatory body. It is a legislative body.

MR. LYONS: Before we go on, I would like to mention a couple of important points in this testimony, if that is possible. Is that--

SENATOR LESNIAK: No, not really. I would like to hear the next witness.

G U I L L E R M O A L B I N O: (at this point, witness starts to testify, with Mr. Lyons translating) My name is Guillermo Albino. I have worked on farms as a farm worker for 11 years, and I am presently an employee of CATA, the Farm Workers Support Committee. I am the President of the Board of Directors of CATA.

As a farm worker, I can give many examples of things which have happened working with chemicals in our area. I am going to be talking for some farm workers who worked on this farm in Hammonton, New Jersey, because they are not here. After this incident, they left the farm; they are not working on the farm this year.

In June 1988, six farm workers were working in a field, when the farm operator came along spraying liquids from his tractor. The farm workers started to leave the field when the spraying occurred, when the farm operator ordered them to stay in the row they were working in. The farm operator told them that the liquid he was spraying was safe, and they didn't have to worry about it.

Then the farm operator sprayed them with the liquid, covering their feet and their legs. He told them that if they left the field, he would fire them. They were sprayed in this manner four times during a period of two weeks.

Within a day after being sprayed, they developed some symptoms, including nausea, vomiting--

UNIDENTIFIED SPEAKER FROM AUDIENCE: Rashes.

MR. LYONS: --rashes, thank you -- (resumes translating) rashes on their skin, but they didn't relate these symptoms to their exposure to the liquid they were sprayed with in the field. Shortly thereafter, an outreach worker from CATA visited their camp, and one of the farm workers showed him the rashes on his skin, and described to him the spraying incidents that had occurred.

The outreach worker asked them if they knew what chemicals they were working with, and they said that they didn't ask the farm operator the name of the chemicals used, because they were afraid that they would be fired. The CATA employee advised them to immediately make an appointment at the local migrant health center, and described to them how to make a complaint to the Department of -- DEP, the Department of Environmental Protection.

After understanding that the DEP inspector could not give their names to the farm operator, all six farm workers signed the complaint. When the inspector from DEP obtained the records from the farmer, she learned that the "safe" liquids were two very toxic pesticides -- endosulfan and gusyon (phonetic spelling). Endosulfan has a reentry time of 48 hours, and is in the same class of chemicals as DDT and kepone.

One of the things that we had hoped to find out, that we were unable to find out, was exactly what the reentry time for gusyon was. We don't know that for sure, but gusyon is an organal phosphate which are, you know, some of the most toxic pesticides made. There are different levels of toxicity for different pesticides, and this is in the highest toxic class of organal phosphates.

Basically, both of these pesticides are very toxic, and we have learned that they can cause very serious problems, both acute problems and chronic, long-term problems, including death. This situation -- this incident -- demonstrates the importance of having a right to know law. Farm workers work with very toxic chemicals, without any rights to know the names of the chemicals or to understand their hazards. The farm workers who were involved did not know that the symptoms they had could be caused by pesticide poisoning, nor did they understand the importance of going to a doctor for medical care. They were afraid of losing their work, because they didn't understand that the law could protect them. These farm workers did not understand that the law says that the farm operator can never spray the farm workers with pesticides -- that the farm operator never can -- and that the farm operator has to tell them of the reentry times for the pesticides. Nor did they know how to file a complaint requesting an inspection. None of these farm workers received training on how to protect themselves when such an incident with pesticides occurs.

To summarize this case, the Right to Know Law in this proposal would assure that these farm workers would understand their rights, that they would understand how to file a complaint, and that they are able to obtain the names of chemicals and information concerning their hazards.

As you know, most of the farm workers who work on the land are Mexicans and Puerto Ricans. We only want to have the same rights that white workers have in this State. We want to enjoy basically the same rights as all other workers in New Jersey. Thank you. (applause)

SENATOR JACKMAN: That was a good report. I want to ask you, have there been any complaints made to the proper authorities concerning the statements that were made by both of these men, under the Right to Know that presently exists in the State of New Jersey?

SENATOR LESNIAK: Senator, the problem is, they don't have any rights under the Right to Know Law. They are excluded from the protections under the Right to Know Law.

SENATOR JACKMAN: On the basis of what? Why?

SENATOR LESNIAK: Because when we passed the Right to Know Law, unfortunately, we excluded farm workers from their protections. That is one of the reasons why this bill is so important.

SENATOR JACKMAN: In the meantime, is there legislation today in the State of New Jersey concerning pesticides on the farms?

SENATOR LESNIAK: Sure there is.

SENATOR JACKMAN: There is? Who enforces it?

SENATOR LESNIAK: DEP.

SENATOR JACKMAN: DEP. Has DEP been notified to the extent of what these men are talking about?

MR. LYONS: In both situations that were mentioned, after the farm workers had it explained to them that there was a formal complaint process and that their names would not be

given to the farm owner, they filed complaints with the DEP. The complaint this year, at the larger farm--

SENATOR LESNIAK: Senator Haines' farm.

MR. LYONS: Okay. DEP has followed up on that; has interviewed the farm workers. We don't know the results of their inspection yet. Last year, the reason we found out the names of the chemicals finally, was because under the Right -- not the Right to Know, but under the Public Information Act, we were able to get the names because, in fact, DEP, in both cases, did respond quickly and thoroughly, and found out -- the way that we found out, through freedom of information -- what chemicals were on the small farm of last year's example. DEP has the right to examine all records, so that is how we obtained that information, through freedom of information. DEP has followed up on that, but that has nothing to do with training about how to protect themselves, or their right to ask the farm owner what chemical they are working with, and what they should do to protect themselves.

SENATOR LESNIAK: The problem is, it is only when an incident occurs that DEP has any real authority to go in and investigate. There isn't the ongoing worker education provisions that we have under the Right to Know Law.

SENATOR JACKMAN: Okay.

SENATOR LESNIAK: Senator Cardinale?

SENATOR CARDINALE: Yes. It is currently illegal to spray people in the field, isn't it, with dangerous chemicals?

MR. LYONS: Sure, under the DEP regulations.

SENATOR CARDINALE: So, this bill does not take that kind of activity and make it any less good than it was before. That is currently a punishable offense.

MR. LYONS: What this bill does, is--

SENATOR CARDINALE: If that farmer had killed those workers, that farmer could have been charged with a very serious offense under the law.

MR. LYONS: He could be charged even if he didn't kill them, sure. But part of the problem is, the farm workers-- I mean, what this bill will provide is that-- Many farm workers don't know that they should never be sprayed; that they have to be informed of the reentry time, which means the time before they can enter into the field safely after it has been sprayed, and they don't know who to call. In terms of reporting, they don't know who to call.

SENATOR CARDINALE: I understand that; I understand that. But you made a very dramatic case of something that is already illegal. That is my point. It is already illegal to spray people who are working in a field. It is almost-- It is very difficult for me to understand, but I will accept it, that people would accept being sprayed; that they would have rashes; and that they would have four separate times that they would be sprayed before they would relate that. If that is a real thing, I don't understand how any educational program we could evolve is going to really get at that kind of a problem.

It seems to me that people are so passive, that they seem to be almost willing to accept anything. It is hard to conceive of someone getting sprayed in a field, getting sick, and accepting the answer, "Don't worry. This stuff is not harmful."

SENATOR LESNIAK: Senator, I don't want to draw the specific analogy, but it wasn't too long ago that it would be hard for us to understand how the people in Poland, in Hungary, in the Soviet Union, in East Germany could actually speak out on issues and talk about the freedoms that we have. It is very difficult for us who have never been in an environment where our job depended on us being hired for these very difficult, low-paying jobs. Maybe it is difficult for you. It is not that difficult for me to understand. For instance, my father worked for 39 years for a chemical company. He was exposed to everything under the sun. He wouldn't think for a moment to

report anything -- any of the problems that went on. You just didn't do it. You were more concerned about making your paycheck and feeding your family, than exposing yourself to losing your job and maybe not getting another job.

I understand why it is difficult for us to understand those things, but this industry now is very similar to those chemical workers 30 years ago, when my father worked. To not give them the education opportunities that we give to the other workers, I think, is the point of this bill.

I'm sorry I had to answer that for you, but I have my own personal views on that.

SENATOR CARDINALE: I can understand the analogy you make with countries where people are not as free as we enjoy being free here today. The specific case here that has been presented to us, is about people who, after spraying number one, developed symptoms. After spraying number two, obviously they must have developed symptoms. That wasn't specifically said, but I-- We were told that there were four separate times that they were sprayed before they went somewhere to get some advice. And then, our law kicked in.

The point that I would like to make to you is, we do have remedies under the existing law. Now, if your whole thrust with this bill is simply to issue to farm workers some kind of -- something that I think is already being done, as a matter of fact -- but some kind of information, that they have rights that they can enforce if they are told, as they were told in the incident that was related to us, that DEP, in fact, will not reveal their names, that they can enforce their rights in a way that does not risk the loss of their jobs-- If you want to strengthen that, that's one thing. But I think that this bill does a lot more than that.

SENATOR LESNIAK: It certainly does do a lot more than that, but one of the most important thrusts of this law is to give farm workers the same types of protections under our Right to Know policies of the State that other workers have.

SENATOR CARDINALE: But you see, under the Right to Know policies of our State, there is a whole plethora of other things than what we are talking about here. Here we are talking about dangerous chemicals. We are not talking about water. Now you know, under the universal labeling provisions, water has to be labeled. I don't want to get into the whole question of the Right to Know Law and the weaknesses and strengths of that law.

SENATOR LESNIAK: This is the same type of protection, Senator.

SENATOR CARDINALE: Well, you see, I think the reason that farmers were excluded -- it was a while ago -- was because so many different things were used on farms that were not harmful. We are talking about things here that are harmful. I have no argument against labeling things that are harmful. If things are harmful, I think they should be labeled, and I think the farmer should be subject to a penalty if he mislabels, and I think he mislabeled here -- at least verbally, according to the incident that was presented to us. He said, "These are not harmful things," and they turned out, when they were identified, to be very harmful things.

That was a horrible incident. Nobody defends that. But at the same time, I think you have to put it into perspective. It is currently illegal to do what was done. It isn't something that we are trying to make illegal. It's currently illegal. So I don't understand how that can be used, except in the very narrow sense of saying, "These people don't know what their rights are." That is a very narrow sense in terms of the whole, and it could have been said very easily, "They don't know what their rights are, and they should be informed of what their rights are."

SENATOR LESNIAK: These are two examples of the consequences of people not knowing what their rights are. They came forward. The question is, how many people never do come forward? We had some testimony that maybe only 25% of them do.

Anyway, we do have to move on. Thank you very much for your testimony.

MR. LYONS: Excuse me, Senator. I have copies of two of the studies that I would like to submit, as well as our testimony.

SENATOR LESNIAK: Please give them to Dale Davis.

Sharon A. Ainsworth, Associate Secretary, New Jersey Department of Agriculture.

S H A R O N A. A I N S W O R T H: Thank you, Senator Lesniak. I appreciate the opportunity to provide comment for the Committee today.

I would like to deviate somewhat from my written text, and then I would like to go back to the first part of my argument. Obviously with the last testimony regarding farm workers, I think there needs to be some clarification as to what kinds of rights workers currently have and what they don't have. Obviously, farm worker protection is afforded under the State Department of Environmental Protection, so I don't feel, as a representative of the Department of Agriculture, that I am the individual to talk with about that. But I do think that the Committee may want to consider having DEP respond to some of the questions raised. Specifically, farmers do have mandates regarding providing workers with information. There seems to be this inference that perhaps that is not the case.

There are centralized postings that are mandated that are intended to alert workers as to what fields have been treated and which ones they may reenter safely. Obviously, as was mentioned earlier, to spray a worker is certainly illegal under the current statute, and obviously, the Department of Agriculture would not condone that kind of use of pesticides. So I think that right up-front, we need to put that issue in perspective.

Also, it appears that the Committee is not aware that there are extensive farm worker standards promulgated at the

Federal level. Specifically at the present time, the Federal EPA is developing final rule making on new farm worker proposed standards. In addition to that, farm workers are presently covered under OSHA hazardous communications standards. Now, the specifics on all that are not our area of jurisdiction, but I do think that the Committee should at least be aware of those as you go through the course of these discussions.

I would also like to note just on farm workers, and then I would like to move on to another topic, that the Department of Agriculture has long supported the need to have data on which to base regulations. We are very interested in whatever kinds of information can be generated from the Department of Health regarding actual documented cases of pesticide exposure. We feel that the documentation is important in dealing with this issue.

I would like to now go back to some of the comments that I really would like to focus on today. Although this proposal contains a lot of mandates found in earlier versions of the bill, it does not seem to address the basic premise of the best way to address the complex issue of insect disease, weed control, and agricultural protection. We believe that the regulation of the use of pesticides -- that further regulation is not the answer to controlling insect pests and disease pests in agricultural production. We feel there is a more positive approach, and we would hope that Senator Lesniak would consider a more positive approach.

In essence, we would like to alert the Committee to some of the existing State programs that seek to eliminate or reduce pesticide use, and other forms of "alternative agriculture." The Committee may be aware of a recently released report from the National Academy of Sciences, which uses this term. As defined in the report, alternative agriculture is a range of technologies and management options being used on farms to lessen potential environmental impact,

while maintaining economic viability. The report stresses programs such as integrated pest management, beneficial insect production, organic farming, and sustainable agriculture as options. All of these programs currently exist in the State of New Jersey.

Although the NAS report does not directly review New Jersey agriculture, it does recognize the difficulty of producing fruits and vegetables without the use of pesticides. New Jersey agriculture is unique in the wide variety of crops produced, with over 70 different vegetable crops, 12 fruit crops, and 10 agronomic crops, as well as a large nursery, sod, and ornamental industry. This diversity provides an economic stability, but also an inherent complexity. Controlling the pest problems on these crops demands a greater commitment to research, not more regulations.

The New Jersey Agricultural Experiment Station has recently responded to this challenge. A sustainable agriculture program has been developed for implementation at their new research facility in Hunterdon County. This initiative will look at the total growing system of a given crop and seek to lessen inputs such as pesticides, while maintaining the economic return. This program represents a long-term strategy for addressing the complex problems of pest control.

Rutgers Extension Service plays an important role in the short-term strategy as well, specifically in the DEP-sponsored training program for pesticide users and also in the Integrated Pest Management Program. The IPM Program centers around the monitoring of pest populations, and recommends spray treatments when it is economically necessary. The IPM Program is available for crops such as: peaches, apples, blueberries, cranberries, sweet corn, and lettuce. This program has helped farmers reduce the use of pesticides by as much as 65% on some crops. Expanded funding of this program

-- the IPM Program -- can provide an immediate benefit to the farmer and to the consumer.

The Department has also been involved in alternative agriculture for a number of years. The Phillip Alampi Laboratory is a state-of-the-art beneficial insect rearing facility which has been successful in raising beneficial insects to counter destructive pests. This program has worked on biological control on a number of crops from alfalfa to soybeans. A current priority is the development and implementation of a program to control the Colorado potato beetle on eggplant through the release of an egg parasite. The Colorado potato beetle is one of the State's most destructive pests to potatoes, tomatoes, and eggplant. The results of this work look encouraging and may eliminate up to 10 pesticide applications in eggplant production.

Finally, the Department, during the past year, has provided assistance to the agricultural sector interested in organic farming. Working with the New Jersey Chapter of the Natural Organic Farmers Association, Department personnel have served on the Chapter's Certification Board and assisted during farm inspections for certification.

The reason for providing this information to the Committee is twofold: First, New Jersey is moving in the direction of improved crop production systems, and second, increasing the regulatory burden of pesticide use will not eliminate the need to control destructive pests in crop production. I sincerely hope the Committee will take this into consideration as you continue to review the bill.

There are, of course, some additional specific points in the bill that I would like to comment on. I have already made some comments regarding the farm workers, so I will leave that section basically as I indicated. We feel very strongly that DEP is the lead agency, and there are a number of existing rules and regulations which perhaps need to be better communicated to the Committee.

Going on to the issue that there would be mandatory establishment of notification zones for pesticide applications, the Department does not agree with this requirement for two reasons: First, the record of agricultural applications does not suggest that nontarget application and off-site pesticide exposure are significant problems. A review of DEP records shows that agricultural complaints are generally less than 10% of the complaints filed. The Department believes that new regulations should be based on an identified problem. The current program which seeks to limit nontarget exposure through the training of applicators is preferable and should be continued.

Second, the establishment of mandatory prior notification could return farmers to a spray schedule approach to pesticide use. Farmers now have the flexibility to spray when needed and when the conditions are right, not just when the scheduled notice may have indicated.

In short, the Department supports the training and education of applicators, and believes this is the most effective way to prevent exposure to areas and individuals outside the spray target area.

The legislation also proposes a ban on the aerial application of broad spectrum pesticides except for applications to lands not actively devoted to agricultural or horticultural use. The Department agrees with the exemption of these lands. However, the proposal requires an emergency exemption procedure if there is an agricultural pest emergency on any other lands.

The Department is concerned that this will hamper our ability to quarantine, eradicate, and control potentially damaging pests and plant diseases in a timely manner. The Department questions the need for being included under this aerial application ban.

In addition, private landowners who seek to protect their woodlots from destructive pests by aerial application will have their options severely restricted. This strategy does not take into consideration that aerial application uses less active ingredient per acre than comparable ground applications.

Finally, the Department would like to comment on the proposed changes to the Pesticide Control Council. The Department believes the Council should continue in their current role as advisors to the Commissioner only. If the membership is expanded, it should be balanced. This should include an individual with training in wildlife biology and a representative of a pesticide manufacturer.

In conclusion, the Department would encourage the Committee to carefully evaluate the impact this legislation would have on the agricultural industry. As was pointed out earlier, the Department strongly believes that research into alternative agricultural systems and education of pesticide users is the best approach, not an increase in the regulatory maze currently facing farmers.

Thank you.

SENATOR LESNIAK: Have you seen the amendments proposed by DEP?

MS. AINSWORTH: No, I have not.

SENATOR LESNIAK: May I ask you to take a copy -- to get a copy from Dale and comment -- provide the Committee and me with the Department's comments on them?

MS. AINSWORTH: Yes.

SENATOR LESNIAK: I just have one other short question with regard to the Pesticide Control Council: You don't object to having a farm worker on the Council, do you?

MS. AINSWORTH: No, sir.

SENATOR LESNIAK: Chris?

SENATOR JACKMAN: I think you inadvertently might have missed a question I asked before, but I noticed you answered it. You said here, "This bill has a number of new provisions dealing with farm workers. In some cases, these provisions do not take into consideration what currently exists in the DEP regulations." I asked this question before. "For example, these regulations require that workers not enter a field until the reentry time has elapsed."

In other words, there is a bill. I asked that question before, and I didn't get the kind of an answer I thought I should have gotten, but I noticed that you answered it here. But you didn't say it, you skipped it.

MS. AINSWORTH: Right. Well--

SENATOR JACKMAN: "The current DEP regulations prohibit worker reentry under this circumstance. Workers are provided with this information by the posting of a centralized map which clearly indicates which fields should not be entered. This section also requires the Department of Health to develop pamphlets for farm workers. The DEP has already developed brochures which provide basic information to workers on how to lessen potential exposure to pesticides."

So, evidently, there are regulations on the books. Are they being enforced?

MS. AINSWORTH: Yes, there are regulations that are currently on the books, and the Department of Agriculture's position is that DEP is effectively enforcing those regulations. As I mentioned early on, I think in terms of specifics as far as what currently exists in DEP's regulations, it might be more appropriate to talk again with DEP. I do have Dr. Mark Robson here from our Department. Dr. Robson is very familiar with those standards, but I believe it would probably be best to hear directly from the agency that is responsible for enforcing those regulations.

SENATOR JACKMAN: Yeah, but you see, the fellow who just finished testifying a couple of minutes ago in Spanish, and then the interpretation-- This individual -- was he told that he should not have reentered that field? Evidently not, because from his testimony, he said he was told to keep going in and going in and going in and going in. Now, if the regulations are on the books, are already in existence -- and I say maybe DEP is handicapped because 15 inspectors are not going to be able to cover the State of New Jersey and come up with answers about these people going into the fields, etc., etc.--

I know I am a pain in the neck asking some of these questions, but I get a little-- I wonder sometimes. Here is a bill that my colleague put together, and they tell me the regulations are already there, but nobody is enforcing them.

SENATOR LESNIAK: Well, they're not already there, to a great extent. But there are other people who are going to be testifying regarding the protections that every other worker in this State has, except the farm workers.

SENATOR JACKMAN: I'm with you. I don't fight with anybody. I'm an easygoing guy, you know.

SENATOR CARDINALE: I'm not so easygoing, all right? Right on the same point that Chris is making -- just one very specific question on that: This booklet that DEP has prepared-- Does this tell farm workers that they can complain to DEP and maintain confidence? You say it is already there, so it is kind of a straw man to say that they don't have that knowledge now. You deal with farmers. Why is it that these individuals did not know they had that right?

MS. AINSWORTH: That is very difficult for me to respond to, since I am not familiar with the situation. The point that I would like to have made in all of this, is that there is an existing mechanism for dealing with situations such as was described earlier on. That, I think, is the key point.

You know, clearly we in the Department of Agriculture can't suggest that there has never been a misapplication or never been an exposure. What we're saying is, there currently are the procedures that DEP has, to respond to that. It is not only DEP, it is the Federal EPA as well. That is the point that seems to be getting lost in all of this. There is this inference that farm workers don't have any rights and, quite frankly, we would disagree with that.

SENATOR LESNIAK: It is not an inference; it is hardly an inference. It is a direct statement that I have made on many, many occasions.

SENATOR CARDINALE: Senator, may I continue?

SENATOR LESNIAK: Anytime you want, Senator.

SENATOR CARDINALE: You mentioned prior notification, and it has kind of been glossed over that this bill sets up some things with respect to prior notification. Can you tell us, from a farmer's perspective, what kinds of practical problems this prior notification suggestion would create?

MS. AINSWORTH: Certainly the most difficult part would be that of course the bill is proposing that this must be done either in person or in writing, etc., that a public notice through a newspaper is not sufficient. So basically--

SENATOR LESNIAK: "To the greatest extent practicable--" Is that the language?

MS. AINSWORTH: That is correct. I am not quite sure, as an attorney, how one would define, "to the greatest extent practicable." The point is, you are dealing with a situation where you are going to be requiring this advance notification at whatever level is determined. Our viewpoint is that we have very limited resources in this State, and those resources should be used to educate applicators. Our feeling is that if the applicator is educated, the potential for nontarget exposure is dramatically minimized, and that with the limited resources we have available in the State, it is preferable to

work on making sure that the applicator is trained and that nontarget exposure is at the very minimum.

SENATOR CARDINALE: I agree with you, but I really want to go back to the point on prior notification and the practical difficulties. You don't have to convince me, but I think we do have to get into the record why it is that this is an onerous thing, because it seems to someone who is not involved in it-- It would seem that that is a very reasonable requirement. Notify us first. What are some of the practical difficulties?

MS. AINSWORTH: The most practical would be that right now we strive to have an approach to pesticide use whereby when there is a pest problem, that is when the spray application is made. If it were required-- Let's say, for example, that prior to every single pesticide application the notification zone had to be alerted, it might mean that a farmer would go back to a situation whereby he would spray every Wednesday and Friday and Sunday, as opposed to only when the pest problem was economically warranted for spray treatment. That is a major concern of ours. We have spent a great deal of time, and the college has spent a great deal of time working on developing economic thresholds for spray application. To get into a situation where you must notify, let's say, every time prior to an application, you are adding such a level of responsibility, that it might lead that farmer to going back to making very scheduled spray applications.

SENATOR CARDINALE: So, to get rid of the regulatory maze, you would say, "I am going to spray every Wednesday"? Just to get rid of having to, say, well, this other thing-- If he would make that one notice well in advance and so forth, that would be his practical way out of it. That would mean that you would probably have more spraying than would be otherwise done, at both an economic and an environmental disadvantage, as a result of this. Now, what happens--

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SENATOR LESNIAK: Senator Cardinale, since you are so interested in setting the record straight, we are not talking about any specific requirement under this bill, are we? We are just talking about a speculative requirement that the Department would have the authority right now to require.

MS. AINSWORTH: That is correct.

SENATOR LESNIAK: I'm sorry, Senator. Go ahead.

SENATOR CARDINALE: What happens if he says, "I am going to spray on Wednesday," and it rains? Can he spray when it rains? I don't know. I really would like to know.

SENATOR LESNIAK: Senator, we are not talking about any regulation that is in effect now or that this bill calls for.

SENATOR CARDINALE: She's talking about prior notification in her testimony, and I would like to have-- We have accepted the testimony--

SENATOR LESNIAK: I just want to make it clear. You're talking about something that--

SENATOR CARDINALE: So, you're willing to say there should be no prior notification requirement?

SENATOR LESNIAK: No, that's the current law now.

SENATOR CARDINALE: I thought you were trying to change the law with your--

SENATOR LESNIAK: We are trying to encourage, to the greatest extent practicable, for people who may be exposed to pesticides to have an opportunity to minimize their exposure. Any specific determination as to what that is will be in the hands of DEP. There are no specific requirements.

SENATOR CARDINALE: So, if I want to--

SENATOR LESNIAK: The only specific requirement under this bill is that legal advertisements alone shall not constitute notice. That is the only specific requirement under the bill. I just want to make it clear that--

SENATOR CARDINALE: But the bill deals with, whether very specifically or by implication, notification requirements. I think it would be useful for us, if we are going to deal with the bill, to know something about the totality of the effect of doing it in that fashion.

SENATOR LESNIAK: Senator, I agree with you. I just want to make it clear that there are no specific notification requirements in this bill.

SENATOR CARDINALE: Well, I'm glad that you agree with me. That's nice; that's nice.

SENATOR LESNIAK: Now, can we have the question read back?

SENATOR CARDINALE: Now, can they spray when it rains?

MS. AINSWORTH: No. Generally, spray treatments would not be made when it rains.

SENATOR CARDINALE: Are there other kinds of atmospheric conditions that might, you know, make it kind of unreasonable to have a specific notice?

MS. AINSWORTH: Certainly if it were very hot out or too windy. There are various environmental conditions that would not be preferable for spray applications.

SENATOR CARDINALE: If there were no bugs, would it be unwise to spray?

MS. AINSWORTH: We would certainly concur that that would be unwise.

SENATOR CARDINALE: So, there are a lot of conditions that really would make it kind of reasonable for us to put in this bill a provision that says that the Department shall not have mandatory prior notification requirements? If we are going to address the subject, don't you think that would be a good amendment for us to have?

MS. AINSWORTH: I would think that-- DEP currently, under their statute, has the ability to establish notification zones. Our sense is that there has not been that kind of a

public outcry that is demanding notification zones for agriculture. In other words, we don't see a record, at least not that DEP has shown us, that suggests that there are numerous people out there who live near farms who are demanding to have prior notice before spray applications.

I would, however, say that a number of farmers voluntarily, on their own, seek input from their neighbors as to, you know, "Do you want to be notified when there is going to be spraying?" I think we do have a lot of farmers who are concerned about individuals who may feel they have a sensitivity to the pesticide applications, but we do not feel that that needs to be mandated in law.

SENATOR CARDINALE: I have a sense that you don't feel that there is a tremendous problem in the area of agricultural application of pesticides under the current regulations. Now, we have heard about a couple of incidents. Are those exceptional incidents, or are those common incidents?

MS. AINSWORTH: Well, certainly to the best of our knowledge, they would be by far the exception.

SENATOR CARDINALE: Thank you.

SENATOR LESNIAK: Senator Jackman?

SENATOR JACKMAN: This bill, as written -- and you are from the Department of Agriculture-- Is this a good bill, as you perceive it?

MS. AINSWORTH: We feel that there are other approaches that are much more positive, that would help to alleviate some of the concerns individuals have about pesticide applications. As I mentioned earlier, there are a number of programs existing in New Jersey that seek to lessen the environmental impact of pesticides. That includes the Integrated Pest Management Program at Rutgers Cook College; that includes their new sustainable agriculture program in Hunterdon County; that includes the Department's beneficial insect rearing facility.

We heard testimony earlier where DEP indicated that they anticipate the costs of this bill will be something like a million dollars. Our sense is that there may be better ways to redirect those funds, to research and training of applicators. It would be much more productive to the farmers and to the citizens of this State.

SENATOR LESNIAK: I just have one final question, Sharon.

SENATOR JACKMAN: Mr. Chairman?

SENATOR LESNIAK: Oh, I'm sorry. Do you have another question?

SENATOR JACKMAN: Oh, yeah.

SENATOR LESNIAK: I'm sorry.

SENATOR JACKMAN: I always acquiesce to you, you know that. I'll get back after you are finished.

SENATOR LESNIAK: Could you comment as to whether this provision in this legislation is positive or not positive? I am talking about section 6 a., amending the composition of the Pesticide Control Council, increasing it from nine to 14 members, and adding-- "Of these members, one shall be appointed from persons with training and experience in toxicology, recommended by recognized research or academic organizations; one from persons with training or experience in ecology, recommended by recognized research or academic organizations; one from persons holding an M.D. degree and trained in occupational safety and health, recommended by the department of community medicine at the University of Medicine and Dentistry; one from persons with training or experience in groundwater hydrology, recommended by recognized academic or professional organizations; one from persons with training and experience in farming, recommended by recognized organizations of farmers; one from persons with training and experience in organic farming, recommended by recognized organizations of organic farmers; one from persons recommended by recognized

organizations of farm workers; one from persons recommended by recognized organizations of pesticide applicators; one from persons recommended by recognized environmental organizations; one from persons with training or experience in integrated pest management, recommended by recognized organizations of farmers; and one from persons recommended by recognized public interest organizations," and even one from-- I would add one from pesticide manufacturers themselves.

Do you think this is positive or not positive?

MS. AINSWORTH: Senator, I feel that this is certainly an area where it is up to the Commissioner of DEP. This is an advisory committee to DEP, and if the DEP Commissioner feels that that additional technical expertise is needed, then certainly that is an area where I feel DEP should take the lead and comment.

SENATOR LESNIAK: Thank you. Senator Cardinale, you asked your questions, right?

SENATOR CARDINALE: I just have one other, which is not really important. I was going to let it pass, but since you asked--

SENATOR LESNIAK: Well, if it is not really important--

SENATOR CARDINALE: I don't mean to appear uneducated as to farming, although I am. What is an agronomic crop?

MS. AINSWORTH: Well, that would be what we would call a field crop, such as wheat, for example.

SENATOR CARDINALE: Thank you.

SENATOR JACKMAN: Mr. Chairman, with your permission-- Do you work very closely with DEP and the Department of Health?

MS. AINSWORTH: Yes.

SENATOR JACKMAN: You do.

SENATOR LESNIAK: Thank you, Senator. Thank you, Sharon.

Rick Engler and Hillary Horn, representing the Industrial Union Council and the Right to Know and Act Coalition, respectively.

MR. SMITH: Senator, may I interrupt for a second? I am Ralph Smith from DEP. I just want to inform you that we do have some of the brochures -- farm workers education brochures -- up at the table here, if you are interested. If there are any questions for DEP, I will be happy to try to answer them.

SENATOR LESNIAK: Thank you very much.

R I C K E N G L E R: Thank you, Senator. My name is Rick Engler. I am the Assistant to the President of the New Jersey Industrial Council, AFL-CIO. We represent over 200,000 public and private workers in this State.

I have been intimately involved in the right to know issue for over 15 years -- involved in both the promulgation of the Federal Occupational, Safety, and Health regulations, and in the passage, in 1983, of the New Jersey Right to Know Law. I was intimately involved in the passage of that law, including the negotiation of the precise language part of the passage including the universal labeling provisions, and I am familiar with Right to Know. I have followed through with its regulations through educational programs for our members and through ensuring that the universal labeling provision will effectively be enforced come March 31 this year.

In August 1983, Governor Kean signed the Right to Know Law. That led to a national development, because not only did New Jersey pass Right to Know laws, but other states did as well. As a response, in November 1983, OSHA issued a proposed Hazard Communication Standard just for the manufacturing sector. Finally, in August 1988, after protracted litigation, that OSHA Hazard Communication Standard was expanded to cover all workers in the United States, and that is referred to in the regulation. I should point out -- and there will be further information about this later on in the hearing -- that

it is our understanding that because of a dispute with EPA and OSHA, EPA has basically said to OSHA, and OSHA has agreed with them, that they will not enforce any part of the Hazard Communication Standard involving farm workers. That refers back to the assertion that was made by the Department of Agriculture, that there is redundancy here; that the Department of Agriculture feels that Hazard Communication already covers farm workers.

Well, that is nonsense. It is the same line that came from the chemical industry for the last decade; that we were just idiots for spending hours and hours, days and days working on a law that was already there. We were so stupid, and we had nothing better to do, that we were going to spend our time working into the middle of the night, simply to have duplicative regulations. It is absurd and it is condescending, and if something needs to be worked out, I'm sure this Committee, in its wisdom, will find a way not to have duplicative State regulations.

Now, in August 1988, enforcement of Right to Know was effective in all industries. What does that mean? It means labeling of hazardous chemicals. It means Material Safety Data Sheets or, under the State program for our public sector workers, Hazardous Substance Fact Sheets. It means training, and it means other forms of warning. By the way, many other forms of warning, including hazard communication plans-- They are not covered in this bill for farm workers, so in some respects, at least, this bill is still less onerous to farm owners than the Right to Know requirements of Federal legislation are to other employers.

I should point out also that Right to Know now really covers everybody but farm workers. It covers the traditional industries that one assumes has chemical hazards, like oil refineries and chemical plants and paper plants. But it also includes non-traditional industries. Our State Right to Know

Law covers the entire public sector. It even covers schoolteachers, school employees, office workers. And between the two laws, everybody is covered, whether you are on a manufacturing site, whether you work in a hardware store, a food store, a gas station, a restaurant, banks, apparel stores. That doesn't mean that it mechanically goes into force. It means that if you may be exposed to hazardous chemicals, then you have certain rights to know.

Let me also say that OSHA, under the Reagan administration, explicitly said, not that you had to prove definitively that there is exposure to chemicals, because then it is too late. We have seen that in this State, that it is too late once you have proved you have been exposed.

The Hazard Communication Standard -- and it is the OSHA regulation that I am referring to; I can provide a copy for the record -- says that you have these rights if you may be exposed to hazardous chemicals. This issue has come up, because there is an attempt to be practical. In offices, for example, OSHA decided that everyone did not have to be trained about the hazards of photocopiers, because -- simply use the photocopier. That would be unreasonable. But there are certainly toners and carbon black and other chemicals involved in photocopiers. OSHA said that people involved in the routine repair and maintenance, and the replacement of those chemicals in the photocopiers, indeed had to be trained.

That means that there are thousands of office workers who have to be trained. State employees and other public workers in this State have to be trained about the toxic chemicals they work with.

So, really, what we are doing is just extending Right to Know to farm workers, to say that these people who work in some of the most onerous situations, have the same rights to know -- have at least the same rights to know as office workers, food store workers, gas station employees, restaurant employees, etc.

You know, it is just very basic. It is a very basic thing. Let me say, this is a right to know. This is not necessarily something more than that. It is simply a right to know about the hazards. The bill doesn't go into all kinds of restrictions on types of chemicals; it doesn't go into a whole broad array of things that one could argue would be part of a full package to deal with this problem. But I would think that if a paper worker could know about the Right to Know, an oil worker, and a teacher, and the whole range of people employed in industry, that farm workers ought to have the right to know.

It is also my understanding, on this question of redundancy again, that there have been many, many meetings with DEP, etc., where all of the language has been gone over, and I trust that that can be reflected in the final version of this bill, if it is not in the draft. No one has an interest in repeating regulations. I certainly have enough other problems to deal with -- plants closing, the lack of health and life insurance for unemployed people, and minimum wage -- so that this is not exactly something that I want to do for fun in addition. It is something that needs to be done, however, in the name of justice and equity.

SENATOR JACKMAN: I notice you mention -- with your permission, Mr. Chairman, of course -- the paper industry. Of course, I look at you, because you know that I represent 57,000 members in this State and in New York. It is very interesting, because it is part of our understanding, and we give notification to every one of our members-- We deal with formaldehyde and other chemicals.

I also noticed that you mentioned banks. Is that right? (no response) Does anybody know when they are handling drug money that was handled by drug dealers-- (laughter) It sounds facetious. You see, people laugh when you say that, but how does the banker know -- or, how does the teller know he or she is handling marijuana moneys, or moneys that were mixed in with heroin or cocaine? Go ahead, laugh; go ahead.

SENATOR LESNIAK: Well, they could roll it up and light it. (laughter)

MR. ENGLER: I do know that the chemical industry has been very concerned about the export of its chemicals that go into drug manufacturing. Perhaps that is a little different, also.

SENATOR JACKMAN: You mentioned, Rick, that the banks-- Of course, any time you are handling money, you very well may be handling drugs. Is that true, or isn't it?

MR. ENGLER: I really don't know.

SENATOR JACKMAN: You wouldn't know?

MR. ENGLER: I'm sure the Federal Occupational, Safety, and Health Administration, under the Reagan administration -- which has not exactly been in the forefront of regulation -- didn't arbitrarily--

SENATOR LESNIAK: Wait a minute, are we still under the-- Don't we have a new President? Don't we have a new administration?

SENATOR JACKMAN: Well, he's talking about a few years ago.

MR. ENGLER: I'm not quite sure. (laughter) But, back to your example, Chris, of the tunnels and the carbon monoxide. If I were a toll collector, if I were a maintenance person, a public employee in those tunnels that we all go through--

SENATOR JACKMAN: I agree with you.

MR. ENGLER: Warnings about the chemicals, data sheets, training -- it's all there. That's a problem. There is a serious problem with CO exposure, and with silica, with asbestos, and with a whole range of things that have an impact on the community.

SENATOR JACKMAN: Rick, that is why I am in agreement that we ought to pick the tolls up in New York instead of New Jersey. Let them get a little bit of the pollution.

SENATOR LESNIAK: Hillary?

H I L L A R Y H O R N: Thank you for the opportunity to testify. My name is Hillary Horn, and I am the Coordinator of the New Jersey Right to Know and Act Coalition. I want to preface my comments on behalf of the Coalition with a personal note, which is that I worked for two different farm worker unions for six years. I wanted to remind the Committee that farm workers are excluded from the National Labor Relations Act. That means that they do not have the same legal rights as other workers to organize unions and bargain collectively.

So because farm workers are predominantly unorganized across the country, they lag behind other workers in wages and working conditions. This situation makes this bill all the more important, because most farm workers in the State have not been able to bargain collectively for much needed health and safety protection, which other workers in the State would be able to. I also wanted to remind you that farm work is one of the most dangerous occupations in the country.

Our Coalition is made up of over 100 organizations across the State. To highlight just a few: the Communications Workers of America, District 1; the Gray Panthers of South Jersey; the Hotel and Restaurant Employees, Local 54; the International Lady Garment Workers Union; New Jersey Citizen Action; New Jersey Education Association; New Jersey State PBA; United Auto Workers; the White Lung Association; and the New Jersey State Firemen's Mutual Benevolent Association -- to name a few. I will distribute a list of the members of our Coalition.

At our last Coalition meeting, we unanimously passed a resolution to support this legislation in its entirety. We believe it is extremely important to farm workers in the community that precautions against pesticide misuse and disclosure about pesticide applications take place. Among national concerns, pesticides rank in the top three among citizens at large and the EPA itself. With documented

groundwater and well water contamination by pesticides already occurring in New Jersey, it is time to address this concern in a preventive way.

This bill is a common sense approach to pesticide use. It builds in a way to get a handle on what pesticides are problematic and gives voice to all interest groups who use or are affected by pesticides. It fills the noticeable gap in the training and protection of farm workers, who have been systematically excluded from Federal and State Right to Know Laws.

Each part of this bill has been implemented in some other state, although no law is as comprehensive as this. Farm workers are the people who work in the fields and are sprayed with pesticides. Pesticides are applied from three to 15 times during a growing season, and accidents do occur. We will submit clippings to that effect, and you heard this morning about some accidents. Prevention will help not only farm workers, but all citizens who are the ultimate consumers of pesticides on the food that we consume.

The time for equity and justice for farm workers is long overdue. We strongly urge you to support this bill. Thank you.

SENATOR LESNIAK: Thank you very much for your testimony.

SENATOR JACKMAN: Thank you.

SENATOR LESNIAK: Susan Shaw, New Jersey Coalition for Alternatives to Pesticides, and Jane Nogaki, New Jersey Environmental Federation. Go right ahead.

J A N E N O G A K I: My name is Jane Nogaki. I represent the New Jersey Environmental Federation, which is a coalition of 45 member groups and 50,000 individual members, who were canvassed at their doors and joined because they care about clean water and a clean environment. I am also submitting written testimony for Robert and Mary Owen, who couldn't be here today. I will turn that in for the record.

I have been working on pesticide issues for about eight years, and I come before the Committee with some hope, but also with some reservations; that is, although we have been working with DEP to get better notification regulations, we still feel that the basic protections offered in the prior Lesniak bill, which was offered five years ago, still have yet to come true. If you are pretending to believe that these legislative rights to know are in place for both community residents and farm workers, please let me enlighten you.

Through the regulatory process -- and we were told during the first go-round of the bill that this could all be done in regulation; you don't need a law to do what you want to do-- Well, we have gotten some notification regulations. I brought some samples of the kinds of notifications we have gotten for indoor applications and for lawn applications. Believe me, while they are a start -- okay? -- this kind of notification does not give community residents at large the right to know about the pesticides they are exposed to. It gives a signal that a pesticide has been applied, but it does not tell you on the back what the name of that pesticide was. Okay?

These regulations were a compromise. They were a compromise from the point of view of the applicators and the community people who wanted these notifications. Now, the customer will receive the name of the chemical that was applied, but the community at large will see the sign and just know that a pesticide was applied, because this was a compromise.

A similar situation exists for farm workers in the notification regulations. They are noticed that a field is not allowed to be reentered. (witness holds up sign) Nowhere can they find out what the name of the pesticide was that was applied in that field, and that is what this legislation will do. It is the name of the pesticides that are applied that

farm workers will have access to. This is what we need legislation for. If you ask the question of DEP today, do they need a legislative mandate to give farm workers the right to know, they will answer you clearly and emphatically, "Yes," that they can do so much in regulations, but as far as the right to know the names of the chemicals that are applied on farms, that is a legislative mandate they need, and would support. But, ask them. Don't count on me to tell you the truth. Okay?

The other kind of notification-- Does anyone want to look at this more closely, or have you seen it? (referring to sign she is holding)

SENATOR LESNIAK: I have one of those.

MS. NOGAKI: Okay. The other kind of notification I borrowed from downstairs -- in the lower entry hallway as you come in. This is now required in public buildings. (holds up second sign) It is a notice that a pesticide has been applied in this building, and it does give the chemical name. Okay? This does give the chemical name of what was applied in this building. It is applied practically on a two-week basis. This is what we would consider adequate notification. The sign could be a little darker, it could be a little larger, but at least we consider this a good form of notification. I will pass this around to let you see it. Then I will want to return it back to its place.

SENATOR LESNIAK: You probably violated the law.

MS. NOGAKI: No, I didn't violate the law. The applicators will tell you that they are required to post that. The public is not required to keep it up. That is a loophole in the law. Okay? We would be supportive of the public being required to keep that up

One part of the bill that I was going to talk about today is the expansion of the Pesticide Control Council, but I think that has probably been pretty adequately addressed; that

it be enlarged, that it be fleshed out, as far as technical expertise, and that the recommendations come from the kinds of people who would fill--

SENATOR CARDINALE: May I ask you a question, right while we are on this point?

SENATOR LESNIAK: You can ask me. Yes, you may ask a question.

SENATOR CARDINALE: Thank you. What benefit, really, is it to me, as an individual who doesn't know anything about what these pesticides are--

MS. NOGAKI: Right.

SENATOR CARDINALE: --to know that-- They have all of these little boxes circled I have to go through. As I read these names, I have no idea, anymore than I had before, of what those things are.

MS. NOGAKI: Does it trigger you to want to know?

SENATOR CARDINALE: No, it doesn't. (laughter)

MS. NOGAKI: Some people don't want to know.

SENATOR CARDINALE: Because if I see that other little sign you have there, that says, "A dangerous chemical has been applied here" -- all right? -- a chemical has been applied here-- To me, it says "dangerous." Once someone posts a sign, I want to avoid that area. What difference does it make to me what specific poison has been put there? I know I should stay away from there. I should take that precaution.

To a farm worker, or to someone else, why is it important, in your mind, that they have the specific chemical isolated there, rather than just, "You may reenter five days from now"?

SENATOR LESNIAK: Senator, if your child strolls into that area and gets sick, you will know immediately -- you should know, if the information is provided, what type of action to take in terms of any remedies. Or, if you had to go to a physician, you would be able to tell the physician, "My

child has been exposed to XYZ." Presumably that physician would know or would have the ability to know. With that notice, you don't know what it is. It could be XYZ, or it could be ABC, and the remedies could be totally different.

SENATOR CARDINALE: That's a good answer.

SENATOR LESNIAK: Thank you.

MS. NOGAKI: It is not out of the question. This has happened to children. Children have played on pesticide-treated lawns and have experienced convulsions, and the doctor said, "What were they exposed to?" Before this law went into effect, the homeowner didn't know what it was.

Likewise, in that list of applications, you will see there are things like boric acid. You know, there are some relatively lesser toxic pesticides available for pesticide control. It starts a dialogue, like, "Why did you use sacraton? Why didn't you use boric acid?" It starts a dialogue between a consumer and the pest control operator about options in pest control. There isn't only one answer. There are varying degrees of toxicity of pesticides, and there should be, you know, reasonable dialogue to approach them -- if that is what you want to know.

SENATOR CARDINALE: I just have to ask you this now. I have learned something already.

MS. NOGAKI: Yes?

SENATOR CARDINALE: If the pesticide is one of these -- and there is an ad currently on TV where somebody sprays an apple, and he bites it, and so forth-- They are advertising a pesticide that is something that you can eat -- all right? -- and it doesn't do you any harm. I don't know if that is true, but that is what is in that ad. Would that require notification?

MS. NOGAKI: Yes, and I will tell you why: We don't feel that there is any kind of pesticide exposure that would be without risk to some people; not to every person, but to some

people who are particularly vulnerable. I'll give you an example: There is a pesticide that is currently in use for gypsy moth control which is considered the least toxic pesticide available. It is called "BT." It is biological. It is not known to be toxic to humans at any level. However, in an aerial application, if schoolchildren were standing outside when that aerial application occurred, and they inhaled that pesticide, it would act as a lung irritant. Okay? The particles of the droplets themselves, a powdery dust, if inhaled, could act as a lung irritant. If one of those children were allergic, or asthmatic, that could trigger an attack.

Therefore, even though that relatively nontoxic pesticide was applied, it could cause a health effect in a vulnerable person. Therefore, we feel that whenever possible, whenever there is the likelihood of exposure, as there is during an aerial spray program over a residential area, that there should be that ability to know what was sprayed, and to be able to know what to do, how to respond in an emergency.

Does that answer your question?

SENATOR CARDINALE: Would that asthmatic symptom require different treatment if it were a different substance?

MS. NOGAKI: I really can't go into the technical nature of that. It is just that you would want to know. It would be better to know that it was BT that was sprayed, rather than a more toxic pesticide, because at least you would be dealing with a physical irritant, rather than a chemical irritant, if that answers your question.

SENATOR JACKMAN: May I ask a question?

SENATOR LESNIAK: Yes.

MS. NOGAKI: The purpose of this is to encourage stimulating discussion.

SENATOR JACKMAN: The average person in this room-- You said that you got this downstairs on the wall?

MS. NOGAKI: Yes, on the wall. Did you ever see it before?

SENATOR JACKMAN: No. (laughter)

MS. NOGAKI: It's been there for months.

SENATOR JACKMAN: Let me ask you this: If a person saw that number 59 was now being sprayed--

MS. NOGAKI: Yes?

SENATOR JACKMAN: Does anybody give you the antidote for 59?

MS. NOGAKI: Well, I'm hoping that if you called the local emergency room-- If you experienced a symptom of exposure-- Say you were walking through the hall the day this was sprayed, and you started to experience shortness of breath or nausea or dizziness, and you called the Trenton Emergency Squad and said--

SENATOR JACKMAN: And you said, "I was breathing number 59--"

MS. NOGAKI: They wouldn't know what 59 meant, but you see, it is queued into a list there of chemicals, so you would be able to give them the chemical name. Hopefully, that emergency room would have the antidote to that pesticide, and would know the treatment. But that is part of this bill also, medical education.

SENATOR JACKMAN: Do you cover that?

SENATOR LESNIAK: No. That just reminds me of a joke, "59 isn't funny." Do you know what I mean? Everybody refers to that joke. Anyway--

MS. NOGAKI: The other part of my testimony deals with the Technical Advisory Committee. I don't know if there is any controversy over that, but it is a scientific body that would be able to advise DEP about pesticide problems that are appearing in New Jersey. How would these problems appear? Probably through the incident reporting system that hopefully will go into effect, because if you are not counting, and you are not looking, you are not going to find.

But, let me tell you: In New Jersey, in the two small well samplings that have occurred for pesticides -- one in 1984 and one in 1987 -- 30% to 40% of the wells sampled -- and they were small numbers; 40 wells sampled in 1984, and 80 wells sampled in 1987-- About 30% to 40% of those wells had five or more pesticide residues in them, residues such as atrazine, alachlor, and aldicarb. So, if you don't think that this is a serious problem in New Jersey, I, as a concerned citizen, think it is serious, and we don't really know how widely contained the problem is. And we won't know until we have a better way of reporting things and looking at things.

Currently, DEP and DOH do not have the staffs, the research money, or the ability to even look at these problems. They are basically putting out brushfires and responding to complaints. They do a good job, and they are sincere people, but they need help. That is why the conclusion of my testimony talks about the return of fines into the Department and the upgrade of penalties. There is no reason why these penalties should be $3000 a day. Twenty-five thousand dollars a day is certainly fair, and in the Clean Water Act, the maximum penalty is $50,000 a day.

The return of the fines into the Department would ensure that there would at least be a set amount of money that could be depended on. As far as upping the registration fees, I think the raising of fees to $150 or $200 per product is extremely reasonable. Susan will talk about how other states have groundwater protection strategies that charge a significant amount more for their registration fees than New Jersey does.

In conclusion, this bill represents a pared-down version of what we originally started with five years ago. We don't need to get into the details of notification and what constitutes notification, because this bill doesn't get into those details. It just says, "To the extent practicable,

notification will be given to people who may be exposed." I don't think that is a debatable issue. I think that in New Jersey we expect that if there is exposure possible, people have the right to know what that is. There are various ways to accomplish this, which we don't have to go into in this legislation, but which can be accomplished in regulation. Other states have farm to neighbor notification, whether it be a list of people who want to be notified, or whether it be a red flag lifted on the field when the area is to be sprayed. It does not have to be complex. We feel that it can be worked out, just as these systems of notification have been worked out. We don't mean them to be burdensome; we mean them to be workable, because we want them to be workable and enforced.

Thank you.

SENATOR LESNIAK: Thank you, Jane. Susan?

S U S A N S H A W: I am representing the New Jersey Coalition for Alternatives to Pesticides. We have been in existence for eight years. I would just like to point out as far as the notification provision in the bill, yes, as Jane as pointed out, we do have posting requirements when pesticides are applied commercially on turf and ornamental. What is lacking is notification concerning agricultural spraying, right-of-way spraying, mosquito spraying, as well as applications to lakes and ponds.

I would like to make a statement concerning the ban on aerial application of pesticides on nonagricultural lands. Connecticut has had the same ban since 1972, with no negative impacts on pest control. The reason why they put this ban on in their state, is because research conducted for the U.S. Environmental Protection Agency showed that when pesticides were applied by airplane, that between 10% and 60% of the pesticide traveled more than 1000 feet from the intended target area in three- to five-mile-per-hour winds.

The Department of Agriculture mentioned that they don't feel that aerial application of pesticides is a problem; that off-site exposure is not a problem. I would just like to point out a recent study conducted by the U.S. Department of Agriculture and University of California scientists, published in February 1987. They found toxic chemicals in fog, and they have reported the occurrence of five pesticides in fog droplets sampled in Beltsville, Maryland and in parts of California.

I would also like to point out that the California Department of Food and Agriculture, which regulates pesticides in that state, released a report in June of 1988. They have shown that a particular pesticide that is an agricultural chemical -- ethyl parathion -- was present at potentially toxic levels in the air near where it was being used. While this ban is not affecting agricultural spraying, I am just using these studies to point out that, yes, there is drift from aerial applications.

I would like to just point out something about certification. DEP feels that certification is not necessary for all people who apply pesticides commercially. They are correct in stating that many of the people who are applying pesticides, who are known as operators-- These operators are trained according to DEP guidelines. I find that when they say certification involves significant testing-- I have taken the examinations and I am certified. I don't think the testing is significant. I think that everyone who applies pesticides commercially should have this general information. Personally, I don't feel an employer is going to really give an individual he is training all the knowledge concerning the hazards of pesticides.

SENATOR LESNIAK: Susan, may I ask you a question on that, because I didn't understand DEP's testimony on that. A pesticide applicator -- not the one who has the certification--

MS. SHAW: The one who has the certification is known as the applicator.

SENATOR LESNIAK: Okay. What about the one who actually applies the pesticide, but does not have to be certified?

MS. SHAW: Well, the applicator can apply the pesticide, but the one who can also apply the pesticide is known as the "operator." He does not have the certification.

SENATOR LESNIAK: Okay. What type of training does DEP require the operator to have?

MS. SHAW: We have never seen the guidelines actually. They are not anywhere in the regulations. (indiscernible response from unidentified person in the audience) They are in the regulations?

SENATOR LESNIAK: I would be interested. (several people speaking at once at this point)

MS. SHAW: But, how can you be sure--

SENATOR LESNIAK: Wait just a second, let's not get into a dialogue. I have those. I'll just look it up.

SENATOR JACKMAN: Here you are, my friend.

SENATOR LESNIAK: Okay.

SENATOR JACKMAN: Don't exert yourself. Take it easy. (laughter)

MR. DAVIS: Do you know where the regulation is?

MS. SHAW: Subchapter 5.

SENATOR LESNIAK: You may go on with your testimony. I am just curious about that.

MS. SHAW: Well, I am concerned. I know that they have operator training, but the thing is, is DEP sure that this operator training is being done according to their guidelines? In the State examination, you either pass or fail. The examinations, by the way-- The textbooks that are provided for the examinations have not been changed since 1972. So they are deficient in a way, because they need updating. Still, I feel

it is better than just an operator training program. I think the passing of the examination would ensure that that person has general knowledge concerning the toxic nature of the pesticides and the precautions necessary to minimize exposure to themselves and to others.

My major concern is, how does DEP really know that this training is being conducted, and that they are following the guidelines?

SENATOR LESNIAK: Well, there's one instance where there is a wide open exception to the training and registration, and that is a person who is working under the direct supervision of a responsible commercial pesticide applicator or private pesticide applicator, who is present at the time and place of application. So, that operator, working under the direct supervision of an applicator, does not have to receive any training at all.

MS. SHAW: That's right.

SENATOR JACKMAN: He's saying, "No."

MS. SHAW: If the person is on-site, he doesn't have to--

SENATOR LESNIAK: Who's saying, "No"?

SENATOR JACKMAN: A guy in the back. He's shaking his head.

SENATOR LESNIAK: Well, I mean, he may say, "No," but--

MR. SMITH: (speaking from audience) They are required to be trained.

UNIDENTIFIED SPEAKER FROM AUDIENCE: But they don't have to be registered.

SENATOR JACKMAN: He's trained, but he doesn't have to be registered.

SENATOR LESNIAK: Let me read from N.J.A.C. 7:30-5.2: "No commercial pesticide operator or private pesticide operator shall engage in, cause, suffer, allow or permit the use or application of any pesticide, without first meeting the

training and registration requirements of this subchapter, unless--"

MR. SMITH: I have those.

SENATOR LESNIAK: It says, "training and registration requirements." Are you saying that you apply the law differently than what it reads -- which isn't unusual?

MR. SMITH: Well, that's just-- If you are going to be an operator, then that is the requirement. You are trained and registered. However, there are other sections of the regulations-- Essentially, the certified applicator part of it says that--

SENATOR LESNIAK: No, we're talking about operators.

MR. SMITH: Right.

SENATOR LESNIAK: Do operators who work under the direct supervision of an applicator--

MR. SMITH: Right?

SENATOR LESNIAK: --have to be trained?

MR. SMITH: Trained and registered, right.

MS. SHAW: Right.

MR. SMITH: But people who are working under the direct supervision of a certified applicator who are not required to be trained or registered as operators, still have to be trained by the applicator. They just don't have to be registered. That is not in subchapter 5. That is covered in subchapter 6.

SENATOR LESNIAK: Right. They are not under any training requirements by DEP, if they are under direct supervision. You don't register them?

MR. SMITH: No, we don't register them.

SENATOR JACKMAN: Well, who trains them?

MR. SMITH: The certified applicator is still responsible that they are adequately trained.

SENATOR JACKMAN: Who trains them?

SENATOR LESNIAK: The applicator.

MR. SMITH: The applicator is responsible that they receive the training.

SENATOR JACKMAN: What does he do, just tell them to go like this? (demonstrates) Is that training? (laughter)

MS. SHAW: That is what I am afraid of.

MR. SMITH: That could be part of it. That is just a part of it. Practical training is a part of our training.

SENATOR JACKMAN: Maybe I'm wrong.

SENATOR LESNIAK: I'm sorry. Go ahead. Could you continue, please?

MS. SHAW: Yes. It was pointed out that every pesticide that is going to be sold or used or distributed in the State of New Jersey has to be registered with DEP. According to these regulations, it says that the annual fee is $80 per product. I would just like to point out that registration fees ranged from a minimum of $250 to $3000 for every brand of pesticide offered for sale in the State. In Wisconsin, primary producers of pesticides, those that manufacture an active ingredient which is used to manufacture or produce a pesticide, must pay an annual groundwater fee of $2000, so that the regulatory body can monitor for pesticides in the groundwater. So you can see that our fee for registration of a pesticide is very low. I would like to recommend that we consider raising the registration fees.

Also, I feel the fees should be higher on a chemical pesticide, as opposed to a nonchemical pesticide, or a botanical pesticide, in order to discourage the use of the more toxic pesticides.

SENATOR LESNIAK: That may be all well and good, but that would be a difficult determination to make, because there isn't always an effective correlation between the two. In the instances where there are, yes, but-- First, you would have to determine what you are trying to attack and the efficiency of that. I mean, I just think that would involve pretty complex

determinations, and to have a registration system based on that would be complex -- not difficult, I mean not unachievable, but pretty complex.

Any other questions? (no response) Thank you. Now we will hear from the Coalition to Stamp Out Chemophobes -- the New Jersey Pest Applicators Association. The President of the Pest Applicators Association is on this list somewhere. (referring to list of witnesses)

G E O R G E F R A N K: (speaking from audience) I would like to know if we may bring Garry Milsom up at this point? We made our appointments--

SENATOR LESNIAK: You may bring up anyone you want. Who do you want up, Mr. Garry Milsom? (affirmative response)

SENATOR JACKMAN: If you bring anyone else up, bring a chair up with you.

SENATOR LESNIAK: The New Jersey Pest Control Association, Inc.

MR. FRANK: I have a short statement that I would like to read to the Committee, and Garry has some specific remarks.

I have been actively involved in the pest control industry in this State for 16 years, and am currently the President of the New Jersey Pest Control Association. My comments today are being presented on behalf of the 400 pest control companies that comprise our membership.

The New Jersey Pest Control Association unequivocally opposes passage of Senate Bill No. 3741 in its entirety. We believe that this bill is detrimental not only to the pest control industry's ability to continue providing safe and effective service to our clients, but is also detrimental to the people of New Jersey.

The text of this bill raises some questions that must be answered. Although specific, detailed comments about several sections of the bill have been carefully prepared and will be presented by other members of this Association during

the course of today's proceedings, it is evident to us that the real issues boil down to legislation versus regulation, and economics.

We are currently regulated by N.J.A.C. Title 7, chapter 30, subchapters 1-10 -- which everyone has been looking at -- which were rewritten and instituted only last year. They are more than stringent enough to effectively govern the control of pesticides from their point of manufacture directly through to their end use by the over 7000 pesticide applicators registered in this State.

The current regulations have been carefully designed and written to effectively protect the citizens of this State from the indiscriminate use of all pesticides. The present system works for all. The present system can be fine-tuned, or even overhauled, as the need arises. Why try to fix something that isn't broken? The people of New Jersey don't need Senate Bill No. 3741. There is no need to legislate something that is successfully being controlled by regulation. We believe that passage of this bill will actually hinder the processes required in instituting changes to existing pesticide regulations as future technology and scientific findings reveal the need for such changes.

Our other major concern regarding this bill is money. Where does it come from? What are the economic ramifications of this bill for the people of New Jersey? In reality, we in the pest control industry are protectors of health and property. Without a doubt, our costs of providing this protection will be increased. Ultimately, the consumer must be burdened with higher prices to maintain a pest-free home environment, eat a meal that has been prepared in a pest-free restaurant, sleep in a pest-free hotel, purchase all manner of products that are undamaged and uncontaminated by pests, and have their medical needs satisfied in health care facilities that are free of pest-borne diseases. Where does the money come from?

Consumers are also taxpayers. It is inevitable that tax money is going to get involved in this someplace. Will they vote for higher taxes? Surely, a great deal of tax money will be required by DEP and the Department of Health to implement and enforce the sections of this bill that would become their responsibility. The costs of increased staffing alone would be staggering. Taxpayers don't want to pay more for the sake of increased bureaucracy. Where will the money come from?

We implore you, our elected lawmakers, to be responsible to the interests of the people of New Jersey. We believe that the only rational approach for you to fulfill that responsibility is to kill this bill.

Thank you.

SENATOR LESNIAK: Mr. Milsom?

G A R R Y M I L S O M: I am President and owner of a pest control company, Delsea of Kenvil, Inc., located in Kenvil, New Jersey. I am also a Director on the Board of the New Jersey Pest Control Association. I am speaking on behalf of the Association, and offer the following comments on Senate Bill No. 3741:

In section 6 a., the bill proposes to increase the makeup of the Pesticide Council. The current Council has only one pesticide applicator -- and not necessarily one representing the structural and urban pest control industry -- out of its nine members. The proposed change increases the Council to 14 members, while still only permitting one pesticide applicator representative. One of the proposed new members is an "organic farmer," which represents a group not involved with pesticides.

The Council makes recommendations to the Bureau of Pesticide Control. Any changes related to the use of pesticides must weigh the risks and benefits of the pesticides use. Such changes also impact on the economics of the general

public in New Jersey. Changes which increase the cost of doing business for professional pesticide applicators cause such increased costs to be passed on to the public.

Therefore, if the Council makeup is changed, we recommend that the Council be composed of representatives of the appropriate scientific communities to weigh the risks and benefits and applicator groups to better determine the cost to the public of any proposed recommendations. Without this balance, the Council cannot make recommendations which are in the best interests of the general public of this State.

On page 4, section 5 proposes certification of all applicators. Certification is a cost which must be passed on to the general public. Currently, only supervisory personnel are required to be certified, except in termite control. The remainder of the applicators must be trained with verified training and the certified applicator is held responsible for their training and actions in the field.

I must point out, that since this current system has been in operation, the number of citations issued by the Bureau of Pesticide Control has dropped from 1501 in 1987 to 1165 in 1989. This is an indication that the system is working and achieving the goals of assuring proper pesticide use.

We support the concept of training applicators. This must be done not only to provide safe and effective service to our customers, but to reduce our liabilities associated with the misuse of pesticides. Our Association has had a long-term, standing training program for our members which is open to nonmembers as well. In addition, we conduct an annual cooperative educational program with Rutgers University. We also provide scholarships to Rutgers' students. We are committed to training. Certification by itself only means an applicator has passed a written exam. It does not ensure that the applicator is responsible nor that he has had sufficient field experience to properly apply pesticides.

If certification is required for all applicators, our costs will rise, which means the general public will pay more for our service without any assurance that pesticide applications will be any better than they would be without all applicators being certified. In addition, if all applicators must be certified, the Bureau of Pesticide Control must increase its capacity to conduct certification exams. Currently, one must often wait two to three months to get an exam date or drive to the opposite end of the State to take an exam at a site which has vacancies. We cannot estimate the increased cost to the Bureau for providing this increased service, but it would be significant. This cost must be paid by the general public, either in the form of increased taxes or higher costs for our service, depending upon how the cost is distributed.

Page 6, section 6 proposes that the Bureau of Pesticide Control certify and regulate inspectors in pest control. Such regulation is not related to pesticide applications. Inspectors only identify problems and sell jobs to the public. The applicator has the ultimate responsibility to apply the pesticides correctly.

The Bureau of Pesticide Control would need more inspectors to regulate this area. This would mean additional certification exams. Both increase the cost to the Bureau which must be passed on to the general public in some form.

Many of the problems associated with inspections relate to real estate inspections. When an issue arises, it usually relates to whether or not termite damage was hidden or accessible at the time of inspection. The Bureau of Pesticide Control does not have the expertise to settle such issues. In addition, the public has access to the civil courts to settle such issues. At that time, experts in inspection are brought in to guide the courts.

On page 6, section 8 proposes more stringent notification regulations. You should be aware that the Bureau generated notification regulations in 1988 which went into effect in 1989. In 1988, at the public hearings on these regulations, we estimated that it would cost the general public in New Jersey approximately $38 million for our industry to comply with them. Since we have worked with the current regulations, we find that this estimate was low. Although we are not opposed to notification on a practical basis, we find that a high percentage of the general public does not care. Here is a significant cost borne by the many to benefit the few who desire it.

We have also found a high level of resistance to posting in businesses by the business owners. This has made it difficult for us to comply with the current regulations. We have had several meetings with the Bureau of Pesticide Control and environmental concern groups to develop workable solutions to this problem. The current Pesticide Control Act does not empower the Bureau to regulate such businesses, only applicator businesses. We are caught in the middle.

Developing workable notification regulations has proved to be a difficult task. It may require another year or more to develop solutions to the problems raised by the current regulations. To impose additional legislation on notification would further mire us into an untenable position, increase the cost to the public, and provide little, if any, benefit. We recommend that the existing regulations be given an opportunity to be worked out. If the Council and the Bureau find that additional regulations are desirable, then they should be generated through the regulatory process, not the legislative process.

On page 8, section 14 proposes the reporting of "incidents" to the Department of Health. We are opposed to this section. From experience, we find that many "incidents"

are not, in fact, related to pesticide exposures. People have a cold and think the symptoms are related to pesticide exposure. People may be unhappy with their pest control service, for whatever reason, and complain they have been made sick by pesticide exposure. Employees of businesses serviced for pest control may have a complaint against their employer, and claim sickness due to pesticide exposure to either get the day off or to take it out against their employer. The collection of such "incidents" without investigation will generate misleading statistics.

We feel that such "incidents" must be investigated by people who have the appropriate expertise. The Bureau of Pesticide Control already does this. We have no problem with the Bureau sharing their information with the Department of Health or other agencies. There is a system in existence for such investigations. The mere collection of "incidents" is meaningless and increases the cost to the general public without any benefit.

Page 10, section 19 proposes that the general public can take civil action against applicators simply because we have violated a provision of the current Act. A majority of the citations issued to our industry by the Bureau of Pesticide Control are related to such items as failing to fill out a pesticide usage report properly or failing to have proper equipment such as a fire extinguisher on a service vehicle. Such citations are not related to unnecessary exposure by the public to a pesticide. To permit the public to bring suit in such situations is equivalent to suing a driver who speeds past you and receives a speeding ticket. That driver did no damage to you and he has already paid for violating the law.

The public already has the opportunity to bring suit when they believe they have been damaged or harmed in some manner by a pesticide application. We see no need to enact legislation for what already exists. To permit suit simply

because we violated some provision of the existing code and no harm or damage can be demonstrated, will increase the number of frivolous suits and increase the cost to the general public.

Page 11, section 9 c. provides the Bureau the right to enter our customer's place of business. We feel that this is an invasion of personal rights. Even the police must have a warrant to enter. Currently, if the Bureau feels there has been a pesticide misuse, they acquire permission to enter and inspect. If the business in question has contacted the Bureau, there is no problem. If the business has not contacted the Bureau, there is usually no problem to investigate. We recommend that this provision be dropped.

Page 11, section 11 k. proposes that the Bureau assign fees to cover their operating expenses. This would increase fees to a level to impose an economic burden on the applicator industries. Any such costs would be borne by our customers.

You must recognize that our industry protects the public's property and health. Pest control in food facilities benefits not only the food facility, but the health of its patrons. The same is true of health care facilities, public transportation, schools, malls, and other facilities utilized by the general public. The public must share in this cost. It would be more appropriate that such costs be shared through general funds from the State.

We already pay for actual costs of maintaining licenses and certification. We are charged for the costs of sampling when the Bureau deems it necessary and when a violation is found. We are paying for the direct costs associated with regulation. To bear all of the Bureau's costs is unfair and could cause some companies to go out of business.

Page 12, section 21 10 b. and d. propose fines of up to $25,000. The current schedule permits fines of up to $3000. You must recognize that the majority of pest control businesses in New Jersey are small, family-owned operations. A

$3000 fine is significant. A $25,000 fine would close the doors of many businesses.

In addition, when violations are found by the Bureau, fines can be, and are, levied against the certified applicator and the business. If there are multiple violations, there can be multiple fines for each. Even with a $3000 maximum, companies sometimes face fines which equal or exceed $25,000 under the current system. To increase the maximum to $25,000 would impose an economic hardship even on the largest pest control companies in New Jersey. In severe cases, the Bureau is empowered to suspend or revoke the license of a company, and this has occurred. Therefore, habitual violators can be removed from the pesticide application business. There is no need to increase the fine maximum to put a company out of business, and the current maximum of $3000 is sufficient to cause a company to change its practices.

Thank you.

SENATOR LESNIAK: Questions? (no response) Thank you.

Rick Hind, U.S. Public Interest Research Group. Rick, you are going to summarize your testimony, right? The entire testimony will be entered into the record.

R I C K H I N D: Thank you, Senator. My name is Rick Hind. I am the Environmental Program Director for the U.S. Public Interest Research Group. We are the Washington lobby office for about 20-per-state organizations across the country, which have about a million members nationwide.

It is a pleasure to come here this morning as a native of New Jersey who swam as a child in Lake Hopatcong with friends after it was sprayed with herbicides, and whose parents had their home treated for termites within the last 10 years. I am happy to come here to try to give you a look at what we see as the national picture in terms of Federal pesticide policy and legislation.

It is probably no secret to you that environmental groups feel that the current laws and pesticide policies of the U.S. government are industry friendly, to use an industry term. We currently have one of the weakest environmental statutes on the books regulating 2.6 billion pounds of pesticides used nationally. Fifty thousand products are covered by that; about 600 active ingredients are covered. According to the National Academy of Sciences, 90% of the fungicides used in the U.S. are carcinogens; 60% of the herbicides are carcinogens; and about 40% of the insecticides are carcinogens. That is based on scant information, really relatively small, incomplete information in terms of all the birth defects, mutagenic, muritoxic health defects which are not done. In fact, EPA admitted in hearings last year, that only two pesticides have been fully registered since they were required to be registered and retested since 1972 -- two out of the 600 active ingredients.

In relation to the 1600 inert ingredients which are claimed as trade secrets by industry, which can become a very severe problem for medical treatment in accidents, EPA recently proposed regulating 110 of them. Many of them are known carcinogens. Asbestos, methylene chloride -- which was banned as a use for air spray several years ago by the FDA -- benzene, and others, are known carcinogens.

The agency's law, FIFRA -- the Federal Insecticide, Fungicide, and Rodenticide Act -- has a provision for especially supposedly dangerous pesticides, called "special review." That special review provision is what alar became famous in recently, as the agency slowly moved along in its regulation. This is the regulatory box that is supposed to get rid of dangerous pesticides. The average time period a pesticide is analyzed under special review is about four-and-a-half years. Captan, which was recently regulated this year, was in special review for nine years. It is a known

carcinogen. EBDCs, which are still on the market -- the most widely used fungicides in the United States and carcinogens -- have been in special review on and off for 11 years.

EPA says that they will take chemicals off the market if they exceed a risk of one in a million. How they calculate that is of some significant controversy. They also admit, and have admitted recently in hearings, that in Congress, they would go down to one in 100,000 cancers in the U.S. population. That's over 2600 people, roughly, who have a potential risk of cancer.

In terms of groundwater contamination, EPA announced in December 1988 that over 39 states contain some 77 pesticides in their well water, which have been sampled from 45,000 well samples compiled from over 100 different studies of groundwater in the United States. About one-third of the wells sampled last year in Minnesota were found to contain pesticide contaminants. EPA's ongoing survey shows fertilizer and pesticide contamination in about half of the wells that they have sampled nationwide.

What this all says, I think, is that the Federal program to protect the public from pesticides is in a shambles, and anything that can be done at the state level will be very significant, not only in protecting citizens at that state level, but also in helping to stimulate Congress to do the right thing -- to coin a phrase used this summer.

The current law is so bad that even EPA, under Bill Riley, has proposed a strengthening of the law to make it easier for EPA to cancel, or ban pesticides. There are two bills in Congress to regulate pesticides in food. Meanwhile, the industries -- the food and chemical industries -- have not been so shy as to propose weakening of the current law and, in fact, to preempt state law when it comes to food safety. Food safety and pesticides, by the way, is the number three environmental problem, according to EPA's 1987 survey of significant environmental problems that face the country.

When we look at farm worker protection, an estimated 300,000 farm workers nationwide are exposed to dangerous levels of pesticides every year. It may be three to five million farm workers and another two million farmers and others who work on farms, who aren't migrant workers, who will be exposed to some of the highest levels and most dangerous chemicals. A National Cancer Institute study found that farmers exposed to herbicides 20 days a year or more in Kansas, faced a sixfold increase in non-Hodgkin's lymphoma cancer in that area over the general population.

So, we're talking about protecting not only the public -- the consumer -- but also the farmer and farm worker. Our view is that to the extent that we protect the farmer and farm worker, we protect everyone else up the food chain. They are the ones who use the most and are exposed to the most dangerous quantities and levels. However, we are all exposed to pesticides through our homes, whether we have pets or through other means, and through going into public buildings which have been sprayed.

So, the environmental groups in Washington have recommended that at least we begin with a phase-out of the carcinogens -- the known carcinogens -- which number at least 60, according to EPA, over the next few years. The current law says that we shouldn't be allowing them on food, but that law is not being enforced, as is common with pesticide statutes. So we favor a phase-out of pesticides that are known to be carcinogens; phase-out of their use entirely. That would protect the manufacturer -- the chemical manufacturer -- the worker in that plant, the farmer, farm worker, consumer, and others.

We also think that record keeping, which I believe is required in New Jersey State law -- one of about 10 states in the country that has some record keeping requirements-- It is only a three-year term that those records are required. We

would recommend that records be stored somewhere in the State, or through community right-to-know committees and commissions, for a longer period of time, perhaps 30 years, because that is the time period when we see the percolation of groundwater and contamination, when we need to come back and look at how cost-effective it is to monitor for pesticide residues in food, and also to have some accountability as to the exposure of farmers and farm workers, who many years later may become ill, in the case of carcinogens. Without those records, we won't be able to match up the things they were exposed to.

Another idea we have along these lines is blood tests, which farmers are voluntarily cooperating with in other parts of the country, to monitor their levels of pesticides or enzyme-inhibiting factors that pesticides often produce in their exposure, if they are not there in the blood cells.

Rewards for whistle-blowers: People who work in the pesticide business are the best people to be able to provide us with information about violations. They may be farm workers or they may be employees of pesticide applicators, or whoever. If they are given rewards, then whether or not they can survive a long-term judicial or administrative process to save their job, or recover their job-- A $25,000 reward, or a $10,000 reward -- as now in Superfund -- may allow more of an incentive for them to do that. Then if they did lose their job, many of them would be protected, at least monetarily, for the time being.

Citizen suits are one of the few areas of environmental statutes. Pesticide law only allows the chemical companies to sue you, not the reverse. Under the Clean Water Act, and other statutes like Superfund and the Solid Waste Disposal Act, citizens can sue to enforce the law. That seems reasonable enough, but we see stiff industry opposition to that, because obviously the government is not enforcing the law now. Any State statute should contain some provision -- as I think your bill does -- to help have some overriding citizen enforcement.

Other ideas that are being addressed in Congress, and may be addressed in other states, will be liability, whether or not-- Right now, EPA punts on the question of who is responsible for cleanup liability. Farmers traditionally want to be exempt from that liability, and under Superfund they can be ordered to clean up contamination from pesticides. We think that a compromise might be to say that if the farmer does use the pesticide legally, then he is not liable, but the manufacturer of the chemical, the one who wrote the label and said it was safe to use in that manner, should be liable for that cleanup, and can afford the cleanup. If no one is liable, then communities will be bankrupted cleaning up Superfund-like sites around the country.

Just a couple of other notes in closing: When hearing earlier testimony, I couldn't help but note the discussion of reentry intervals in terms of fields for farm workers. In Washington, farm workers not only don't have any rights, they don't have any lobbyists or political action committees. But in California, a stronger statute has been put into place. There, safety intervals before you can reenter the fields range from 48 hours to 30 to 60 days, whereas with the Federal government, as far as I know, the longest interval is 48 hours. So, you're getting no protection when it comes to Federal protections. OSHA does not apply, and FIFRA certainly doesn't apply.

I'll close with that. It is a pleasure to be here. I would be happy to try to answer any of your questions.

SENATOR LESNIAK: Senator Jackman?

SENATOR JACKMAN: No.

SENATOR LESNIAK: Senator Cardinale?

SENATOR CARDINALE: No.

SENATOR LESNIAK: Thank you very much for your testimony.

Wayne Falkowski, Coalition Against Toxics. Wayne?

W Y N N E F A L K O W S K I, R.N.: It's Wynne.

SENATOR LESNIAK: Yes, I was going to say, you don't look like a Wayne. I'm sorry.

MS. FALKOWSKI: That's okay. I've been called worse.

SENATOR LESNIAK: I just ask you, if you can -- if it is possible -- to please summarize your testimony.

MS. FALKOWSKI: Yes. I have prepared written testimony, but a number of the issues, I think, have already been addressed adequately, so I will skip right through those.

SENATOR LESNIAK: The written testimony will be entered into the record in its entirety.

MS. FALKOWSKI: Thank you. My name is Wynne Falkowski, and I am Chairman of the Coalition Against Toxics, which is a grass roots citizens' group in southern New Jersey -- Burlington County. We work specifically to reduce pesticide exposure to people and the environment in New Jersey. While recognizing the right of farmers and the pesticide industry to do business in New Jersey, we nevertheless uphold the right of citizens to live in a safe environment and to be able to avoid pesticide exposure whenever possible. The proposed legislation will help to make that choice possible.

Briefly, I will just focus on the aerial application and the gypsy moth permitting system. I got involved with this mainly because of exposure from the treatment of gypsy moths. What this bill will do, is not ban aerial application of pesticides, but just restrict the use of chemical pesticides over residential areas. It specifically leaves the farmers out of it. We don't have any intention of interfering with the farming process.

Currently, in Evesham Township, New Jersey; and also in Monmouth County; Ontario, Canada; and Connecticut, there are similar restrictions. I think you can use Evesham Township as kind of a pilot project for New Jersey. We have had an ordinance passed that basically provides for this restriction

and we have had, to our knowledge, virtually no violations of the law for five years.

I am trying to summarize, without reading everything. The choice of substance that they use in Evesham Township is BT, which is a biological, target specific pesticide. We have had some good results with it. As a matter of fact, for the past five years, the Department of Agriculture in New Jersey has been offering BT and not the toxic chemicals to be used over residential areas.

Every year there are cases of citizen complaints about exposure of children waiting for school buses. Since these incidents are nearly impossible to prevent, it is imperative that the least toxic alternative be used in the aerial spraying program.

As far as the gypsy moth permitting system is concerned, right now the regulations-- I congratulate DEP for improving their regulations over the past several years, but as the regulations stand right now, there are residents out there in communities and municipalities who are spraying for gypsy moths prophylactically, if you will. Every year they contract with someone to come out, whether they have the problem or not, and there are residents who actually spray more than once. So the benefits of the gypsy moth permitting system would be to make sure that you are spraying to control a pest that actually exists, and to prevent multiple exposures from multiple spray programs.

Included in my testimony are facts about the number of acres that have been sprayed of all of the acres in New Jersey over the past several years.

I won't get into the certification. I think that has been addressed. I just briefly listed any number of experiences that I have had with exposure. I think notification would have prevented a lot of those exposures.

Just at the end, I would like to say that I am also a registered nurse. My husband is a physician. He couldn't be here today, but we strongly support the physician education that is provided in the bill, and also the reporting. Again, I don't have the statistics you have been asking for, because there is no mandatory reporting system. We did our own personal little survey of friends and other colleagues that are emergency room physicians. They have no background whatsoever in pesticides. The education is sorely needed there.

In conclusion, I would like to say that I have seen, have read about, and have had personal experience with increased incidents of late onset of allergies and sensitivities to chemicals in general. This is something new that is being researched, usually in people over 30. Normally, when children get allergies, they outgrow them. Now we are seeing people who never had allergies developing these sensitivities. It is believed that this is from cumulative, chronic exposure to chemicals in everyday life.

If this bill becomes law, you will have the satisfaction of knowing that you have contributed toward eliminating some of those exposures.

Fast enough?

SENATOR LESNIAK: Okay, thank you.

MS. FALKOWSKI: Thanks a lot.

SENATOR LESNIAK: Ilona Gray, The Alliance for Environmental Concerns, Inc.

I L O N A G R A Y: Senator Lesniak, a constituent of Senator Cardinale's who couldn't make it today, asked me to deliver his testimony this morning.

SENATOR LESNIAK: Okay, thank you.

MS. GRAY: I don't have 12 copies of that, though.

MR. DAVIS: We'll run copies of it.

SENATOR LESNIAK: Before your testimony, let me just clarify something with regard to the training and certification

requirements of pesticide applicators. I think we were given the wrong impression before.

A person does not have to be certified, as long as he works under the direct supervision of a commercial pesticide applicator. Direct supervision only means under the instructions and control of a person who is available if and when needed, even if not physically present. I think we got the impression from testimony before that a certified applicator had to be present, and that is not the case under the current regulation.

I'm sorry. Go ahead.

MS. GRAY: Good morning. I know it is getting late, and a lot of us are tired, including myself, and we haven't eaten and our blood sugar is dropping. So what I will do is just try to cover some of the main points, and I will leave my testimony with you.

SENATOR JACKMAN: Mine is rising.

MS. GRAY: Yours is rising? (laughter)

Just a brief little history about the organization: The Alliance for Environmental Concerns is a nonprofit organization representing, through its association members, a majority of the professional pesticide applicators in the State of New Jersey, as well as those whose livelihood is dependent upon the appropriate use of pesticides. There is a list at the back of my testimony for you to take a look at. I will not read from it, but there is a list of approximately 17 associations. These associations probably represent, as I said, a majority of the professional applicators in the State of New Jersey.

As part of our mission, The Alliance -- and I will refer to us as The Alliance, just to shorten it and make things go a little quicker -- issues newsletters updating its members on regulations, on legislation, and on general educational information affecting pesticide use. We want you to understand

that this is not a relatively new organization. It has been around since 1981, and I have been involved with the organization for approximately six years now.

SENATOR LESNIAK: Should we read the membership?

MS. GRAY: If you want to. Do you mean read it aloud?

SENATOR LESNIAK: The Chemical Industry Council, the Chemical Specialties Manufacturers Association, the New Jersey Pest Control Association, the Morris County Board of Agriculture, the Passaic County Board of Agriculture, the Atlantic County Board of Agriculture, the Monmouth County Board of Agriculture, the Bergen County Landscaper Contractors Association, the North Jersey Landscape Association, the New Jersey State Florists' Association, the New Jersey Chapter of International Society of Arbori--

MS. GRAY: Arboriculture.

SENATOR LESNIAK: --Arboriculture. I know how to pronounce it, thank you. The Golf Course Superintendents Association of New Jersey, the New Jersey Cemetery Association, the New Jersey Christmas Tree Growers Association, the New Jersey Turfgrass Association, the New Jersey Nursery and Landscape Association, Inc., and the New Jersey Arborist Association.

SENATOR JACKMAN: The Cemetery Association?

SENATOR LESNIAK: Now, you are opposed to the bill in its entirety?

MS. GRAY: Yes.

SENATOR LESNIAK: There is nothing in this bill that you support?

MS. GRAY: No, not at this time, sir.

SENATOR LESNIAK: Okay. Therefore, you don't think that, for instance, we ought to have a farm worker on the Pest Control Council; only farmers should be on the Pest Control Council?

MS. GRAY: No, sir. What I was about to say, I guess just in the preliminary statement, was -- and I think I will refer back to it-- You will have to pardon me. I am getting a little bit nervous. Although I do sit on the opposite side, I have been on a school board, so I know what it is like to be on both sides of the table.

No, actually, Senator Lesniak, what-- I'll just take the very beginning. The New Jersey Department of Environmental Protection, specifically the Pesticide Control Program, has just gone through a revision of their code -- an extensive revision of the code under the notification section. Basically, what I was going to go through with the different points, was to point out that The Alliance feels that pesticides should be regulated through the regulatory agency, and not have the additional burden of putting on a legislative law. One of the reasons why -- and I don't state it specifically in the testimony -- is-- For instance, when we have gone through changes in the regulations, many times things that look very good on paper, in actuality and in fact don't work out in the realm of reality out there.

With regulations then, we can go back to the regulators--

SENATOR LESNIAK: Let me just repeat my question: You think that a farmer is appropriate to have on the Pesticide Control Council, but a farm worker is not?

MS. GRAY: Oh, okay. Specifically? The farmer, because the farmer uses the pesticide, I feel. The farm workers themselves-- If you are talking about an occupational thing, Senator Lesniak, then you would need really, I would think, someone to represent the occupational-- Those who would be occupationally exposed to pesticides-- You would have to include a number of them who are not on there, besides farm workers. It would have to be your applicator, your PCO, your LCO -- there are a number of them.

SENATOR LESNIAK: But you think it is okay to have a farmer on, but not a farm worker?

MS. GRAY: Well, the farmer would be the person who would be supervising the farm worker.

SENATOR LESNIAK: I mean, that is your concept of a fair, balanced, and well-rounded board?

MS. GRAY: Well, a person who would represent an occupationally exposed person might instead be an M.D., but DEP itself could--

SENATOR LESNIAK: Okay, then let's talk about that: Do you object to having a person with an M.D. degree and trained in occupational safety and health on the Council?

MS. GRAY: Not necessarily. The DEP could go to those people. As a matter of fact--

SENATOR LESNIAK: Do you object to that person being required to be on the Pesticide Control Council?

MS. GRAY: No, not directly, sir, if that type of information is needed, and DEP can go to them. Right now, I believe there are three who are on there. There is a toxicologist, I believe. There is an ecologist, and I would have to refer back again--

SENATOR LESNIAK: What are the backgrounds of the toxicologist and ecologist currently on the board?

MS. GRAY: I think I stated in my testimony that we feel there should be a board-certified toxicologist, but that DEP can determine that themselves. Why write a legislative bill to that effect? The ecologist-- I think I suggested that if DEP needed, or felt that they needed to define that, they could have someone who has a Ph.D. in ecology, someone who has worked in ecology for three years or better in the State of New Jersey. But again, I would suggest that DEP would be best to determine that, not have a legislative law.

SENATOR LESNIAK: Who is the current ecologist on board?

MS. GRAY: Pardon me?

SENATOR LESNIAK: What are the qualifications of the person who serves in the role of ecologist on the board?

MS. GRAY: Right now, I think it is just a very general statement. It says--

SENATOR LESNIAK: I'm talking about the person who physically occupies that position. Do you know that person's background?

MS. GRAY: Oh, right now? Dr. Patrick Slavin I believe, if you are asking specifically, because I attend the Council meetings. I believe it is Dr. Patrick Slavin. Henry? (requests response from associate sitting in audience, who answers in the affirmative) Yes, I think so, who has a Ph.D.

SENATOR LESNIAK: How about the toxicologist?

MS. GRAY: The toxicologist used to be Dr. Michael Gallo. I'm trying to recall right now; I've forgotten. Again, Henry, can you remind me? (inaudible response from audience) Henry and I attend the Council meetings. These people are already on there, Senator Lesniak. If DEP needs expertise in certain areas, it is certainly within their realm to--

SENATOR LESNIAK: They support this provision of the bill, so obviously they believe they do.

MS. GRAY: Well, I was listening to their testimony--

SENATOR LESNIAK: Therefore, you support this provision.

MS. GRAY: If I am supporting through their-- Not at this time.

SENATOR LESNIAK: Well, you say, "If they need the representation--" They support--

MS. GRAY: Sure. Then they could do it through regulations, sir.

SENATOR CARDINALE: Senator, may I--

SENATOR LESNIAK: No, you may not, Senator. They support this provision. Therefore, you support--

MS. GRAY: They could do it through their own regulations.

SENATOR LESNIAK: Senator, I am trying to find out if there is one thing in this entire bill -- one iota of good in this bill -- that the Chemical Industry Council, the Chemical Specialties Manufacturers Association, et al., et al., et al., can find in their hearts to support. That's all -- one thing. But I guess--

SENATOR CARDINALE: Well, now, I see on here--

MS. GRAY: Not at this time, sir.

SENATOR LESNIAK: --the answer is -- and I will end the line of questioning-- I guess the answer is, "No."

MS. GRAY: Not at this time.

SENATOR CARDINALE: I notice on here the Bergen County Landscaper Contractors Association. Since I am from Bergen County, I feel compelled--

SENATOR LESNIAK: Yes, well, I also mentioned that.

SENATOR CARDINALE: I don't think it is fair to take this witness -- to say to this witness, "Is there not one minute provision that you support?" when you haven't--

SENATOR LESNIAK: Senator, this witness--

SENATOR CARDINALE: --taken the other witnesses, and said similar things. You haven't said to them--

SENATOR LESNIAK: Senator, no other witness has said, "The Alliance is opposed--

SENATOR CARDINALE: --"Isn't there some little thing that you support?"

SENATOR LESNIAK: --to the bill in its entirety." Maybe the Pest Control Association did, I think. Sorry I didn't ask that question. That was an oversight of mine.

MS. GRAY: I tried to make it simpler, sir.

SENATOR LESNIAK: But this is the only witness, other than the Pest Control Association, who goes around calling people names.

SENATOR CARDINALE: I didn't hear her calling anybody names.

SENATOR LESNIAK: Well, I'll show you press in yesterday's paper, okay?

SENATOR CARDINALE: I didn't read it.

SENATOR LESNIAK: They go around calling people names.

MS. GRAY: Sir, I did not call--

SENATOR LESNIAK: I am not finished. By the way, it was a member of this organization, but I am not going to paint you with guilt by association. However, in addition to that, this is the only other person who testified who says, "There is not one bit of good in this entire bill," and yet, by -- I'm sorry -- your own testimony, you're saying that if DEP wants this expertise--

MS. GRAY: Right.

SENATOR LESNIAK: --they will get it. Well, DEP has come before this Committee and said that they want the expertise on this Pesticide Control Council. So, are you saying-- Are you changing your statement?

MS. GRAY: No, they can do it through regulations, Senator.

SENATOR LESNIAK: They're saying they want it.

MS. GRAY: If they need a hydrologist--

SENATOR LESNIAK: They say they want it on the Pesticide Control Council.

MS. GRAY: --if they need a medical doctor, then they can go right back to the regulations. It is very easy. They open them up almost once every 18 months, maybe even closer.

SENATOR LESNIAK: They can't get the numbers. They want additional people on the Pesticide Control Council. I am just saying-- You can't speak for DEP, in that regard, because they support most parts of this bill.

MS. GRAY: No, no, I can't. Well, sir, I am not privy to their material beforehand.

SENATOR LESNIAK: Were you here when they testified?

MS. GRAY: Yes, I did listen. I also heard a number of inaccuracies, but I wasn't going to refute all of those either. I heard some inaccuracies on groundwater.

SENATOR LESNIAK: No, no, that is not what I am asking. I am just trying to find out one thing, but I guess you dismiss the entire bill.

MS. GRAY: At this time, sir, yes.

SENATOR LESNIAK: And every single organization on The Alliance supports your testimony? Every single organization on this list that is a member of The Alliance for Environmental Concerns supports your position?

MS. GRAY: I would say approximately 80%. Senator, we never have 100% concur with this. You have to understand that.

SENATOR LESNIAK: Does the Chemical Industry Council oppose this bill in its entirety?

MS. GRAY: I would like the person who represents them to speak on that. I don't believe they are listed on here.

SENATOR LESNIAK: Well, they are listed in your organization -- The Alliance for Environmental Concerns. I am just curious whether the Chemical Industry Council objects to every provision in this bill. You don't know if they do, or they don't?

MS. GRAY: Well, as far as I know, as far as I can understand, I would say, "Yes," sir. Okay?

SENATOR LESNIAK: Okay.

SENATOR JACKMAN: May I ask a question?

SENATOR LESNIAK: I have no more questions. I have asked too many questions.

SENATOR JACKMAN: Oh, no, may I ask one? (no response)

SENATOR CARDINALE: Senator, my comment to you, as a friend -- you know, I have been on this Committee for a long time--

SENATOR LESNIAK: I just can't believe, Senator, that there is not one thing--

SENATOR CARDINALE: --is that it is not fair to treat a witness like this--

SENATOR LESNIAK: --in this bill--

SENATOR CARDINALE: --who comes before you, just because the witness obviously disagrees with your bill.

SENATOR LESNIAK: I don't mind. I have called many people, but I haven't had one person--

SENATOR CARDINALE: It is not fair to treat the witness this way. I mean, let the witness give her testimony.

SENATOR LESNIAK: Senator, I will.

SENATOR CARDINALE: We have sat here and we have listened to a lot of testimony.

SENATOR LESNIAK: She can have as much time as she wants. That is why I called her. As a matter of fact, Senator, that is why I asked you, do you want anybody to testify?

SENATOR CARDINALE: That's right.

SENATOR LESNIAK: But I'm trying to find out-- I guess I found out that the answer is, "No."

SENATOR JACKMAN: Well, I don't believe that.

SENATOR LESNIAK: There is not one thing in this entire bill--

SENATOR JACKMAN: I don't believe that.

SENATOR LESNIAK: --that is of any worth.

SENATOR JACKMAN: I don't believe what you're saying. I don't believe you believe what you're saying. Do you actually believe that there should be no legislation, only regulations? Is that what you said, in essence, Ms. Gray?

MS. GRAY: In essence, yes. In essence, right.

SENATOR JACKMAN: In essence, okay. Then when we turn over, in every one of these departments-- I just remembered-- If memory serves me right, I think the Department of

Agriculture said they have no enforcement powers. Is that true, or isn't it?

SENATOR LESNIAK: The Department of Health.

MS. GRAY: The Department of Health.

SENATOR JACKMAN: The Department of Health said they have no enforcement powers. So if they have a regulation, how do they enforce it?

MS. GRAY: Well, the limited funding-- You're correct--

SENATOR JACKMAN: Oh, we're talking about money now.

MS. GRAY: Yes.

SENATOR JACKMAN: Oh, that's a different story. Now, if we've got the money, are you going to go along a little bit with his bill?

SENATOR LESNIAK: No, no, in its entirety, Senator.

SENATOR JACKMAN: What do you mean? You're never going to get everything 100%.

SENATOR LESNIAK: It says right here. All right.

As I asked other witnesses, will you please summarize your testimony, because the hour is late?

MS. GRAY: Okay. Part of the reason why we are opposing the bill in its entirety, Senator Lesniak, is because we just went through several months of public hearings. We just had some changes in the Pesticide Control Code to address notifications, specifically. We went through hearings in 1987 and 1988, and there was a lot of extensive input from the public, I might remind you. And the regulations have just come into effect. They were printed in the "Register" in November of '88.

This bill then comes up. This bill addresses things that were not put into regulations. These were points that came up at the public hearings. The regulatory agency decided that they would write the regulations, taking these points out.

We're saying that what this bill does, is totally circumvent that whole approach. This bill, then--

SENATOR JACKMAN: Who conducted these hearings?

SENATOR LESNIAK: Not the Legislature, that's for sure.

MS. GRAY: No, no.

SENATOR JACKMAN: Who conducted these hearings?

MS. GRAY: It was DEP, sir.

SENATOR JACKMAN: DEP conducted hearings?

MS. GRAY: It was the Pesticide Control Program, to be specific, sir.

SENATOR JACKMAN: Were any legislators invited, to your knowledge?

MS. GRAY: I do not know. I do know that the public-- I see a number of the public--

SENATOR JACKMAN: I hope you don't think I am being facetious. It wasn't a secret meeting, was it?

MS. GRAY: No, no, sir, it was not. It was in several newspapers. It was also for those people who get the regulation changes-- It was listed in there, too. DEP made a point of sending out, to a number of people--

SENATOR CARDINALE: Senator, I would like to suggest to you that there are quite a few meetings in the State of New Jersey held by the administrative branches of government, which we never get invited to.

SENATOR JACKMAN: Oh, is that right?

SENATOR LESNIAK: I hesitate to--

SENATOR CARDINALE: They hold hearings all the time.

MS. GRAY: Sir, as a matter of fact, there is a point here where I go to the Legislature. May I just read that one point, then, at the end?

SENATOR JACKMAN: Oh, sure, that's important.

MS. GRAY: Okay. It has to do with funding.

SENATOR JACKMAN: That is what I thought you were going to come to. You always need us when it comes to money.

MS. GRAY: Certainly, because we have limited funds. I was on a school board for three years, sir. I know quite well what limited funding can be, and what you have to do with limited resources.

The section on page 11 -- section 20 -- which I am sure DEP would very much approve -- that is, that the DEP fees shall reflect the actual or projected expense incurred by the Department for registration, certification, and permit fees-- Current funding sources for DEP right now are the EPA grants, State and Treasury appropriations -- which you are very familiar with, and which are part of the legislative branch -- and then DEP's collection of fees. To permit DEP to cover the State shortfalls in funding would be an abnegation of the legislative responsibility. What it would do is, it would permit the regulatory agency to tax its constituents for actual and projected costs. The bill leaves no checks and balances, and permits an easy abuse of power. In other words, this would take away from the legislative part of it, where the Governor takes part of the State funding away, and the legislative branch then votes on it.

Sir, this would say-- This part of the bill would then allow DEP to cover all shortfalls in that case. We are definitely opposed to that section. We go on to explain it. So, the legislative branch-- We definitely look to it in making sure that the regulatory agencies do not become, maybe, empire building.

SENATOR LESNIAK: How come the Union County Board of Agriculture isn't on The Alliance?

MS. GRAY: Senator, to be exact, I haven't approached them.

SENATOR JACKMAN: I get a great charge out of the Cemetery Association.

MS. GRAY: Oh, you do?

New Jersey State Library

SENATOR CARDINALE: Do they have farms underneath?

SENATOR JACKMAN: Most of the people in there are dead, right?

MS. GRAY: No, no, no. These are the superintendents.

SENATOR CARDINALE: They don't allow tank farms, then.

SENATOR LESNIAK: We had farms in Elizabeth. I am embarrassed to admit that I remember when we did have farms. I do go back a little bit.

Thank you for your testimony.

MS. GRAY: Okay, Senator.

SENATOR LESNIAK: We are going to have to conclude today's hearing. We have heard an awful lot. I know there are many people who want to testify. I would ask you to please prepare your testimony in writing. The record will be held open for 30 days. We have a lot of information that was developed in this hearing to go through. We will go through equally what is submitted today and what is submitted in writing subsequent to this hearing.

Thank you all very much for your testimony.

(HEARING CONCLUDED)

APPENDIX

New Jersey State Library

SUGGESTED AMENDMENTS AND COMMENTS TO S-3741.

TESTIMONY BEFORE THE SENATE LABOR, INDUSTRY AND PROFESSIONS COMMITTEE.

OCTOBER 10, 1989

PRESENTED BY THE:

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION. DIVISION OF ENVIRONMENTAL QUALITY.

ANTHONY J. MCMAHON,
ACTING DIRECTOR

DEPARTMENT OF ENVIRONMENTAL PROTECTION

TESTIMONY REGARDING SENATE BILL

S-3741 SPONSORED BY SENATOR RAYMOND LESNIAK

Thank you for the opportunity to present the Department of Environmental Protection's comments regarding Bill S-3741, amending the Pesticide Control Act of 1971. In general, there are concepts presented which the Department (DEP) supports and which will enhance the effectiveness of pesticide control efforts in the State. We do believe, however, that there are provisions which are not necessary since the current broadly written law already provides the appropriate authority. There are also sections which are either unworkable or may have a potential negative impact, if enacted.

The following are more specific comments and recommendations enumerated by section:

Pesticide Control Council (Number 1, Page 1) - The Department supports a well balanced, knowledgeable Council, with its members having diverse backgrounds. The proposed increase of members from 9 to 14 is acceptable except that the even numbered membership may cause a logistical problem when there is a "tie vote" on a given issue.

There is also an overlap in the field of expertise or interest in a few of the positions proposed. For example, the Integrated Pest Management expert may offer a similar perspective and expertise as the organic farmer. The same applies to the environmental organization representative and the member from a

recognized public interest organization. Since total membership must be limited, it is important to provide representation with the broadest based background and expertise. Thus, the Department suggests replacing the organic farmer with a local health official involved with County Environmental Health Act programs. The environmental representative should be replaced by a representative with fish, game and wildlife expertise, since this environmental component is frequently impacted by pesticide use. The Department also suggests adding one additional member to bring the total membership to 15, and recommends a representative from the pesticide manufacturing sector to provide this important perspective.

The proposed representative with training in occupational safety and health should not be restricted to one having an MD degree since this will greatly narrow the field of experts and perhaps limit the ability of the Council to find an interested candidate with such credentials. There are highly trained, capable experts in this field without an MD degree.

The annual report to be generated by the Council should be submitted to the Commissioner since the Council is an advisory body to the Department of Environmental Protection and <u>not</u> an advisory group to the Legislature.

<u>Technical Advisory Committee</u> (Number 4, Page 4) - The Department supports this section as it will provide permanency for this much needed group. One full-time technical person will be needed for the Department's staff to coordinate activities of the Committee.

The cost for the position plus operating expenses total approximately $80,000. To perform the technical studies and reviews through contracts and inhouse work would cost at a minimum $100,000 annually.

Certification (Number 5, Page 4) - The Department has enacted a certification and registration program for commercial and private pesticide applicators and operators as outlined in N.J.A.C. 7:30 Subchapters 5,6, and 8. The Department is committed to upgrading the programs as necessary and believes this amendment to the law is not necessary.

Full certification for every commercial applicator may have a serious negative impact on businesses and government agencies depending on seasonal employees which cannot afford the time consuming administrative exam process. It will also negatively impact the full-time capable employees who are working under the direct supervision of the responsible licensed applicator and who simply cannot pass a written exam. There is currently a 40% failure rate on the written exams. Also, an analysis of enforcement files does not indicate a disproportionate number of violations for Pesticide Operators versus fully certified applicators.

As an alternative, the Department proposes that the current Pesticide Operator registration program be upgraded to require that the training of the Operators in the safe and proper use of pesticides be provided in formal courses with a verification process to ensure that the Operators receive the training and are

knowledgeable in the basic functions needed to perform their jobs. This upgraded Operator program will better serve to ensure that knowledge of the safe use of pesticides is obtained, compared to the full certification requirement of reading manuals and passing exams. It must be noted that the fully licensed applicator would continue to be responsible for the work of an Operator under his direct supervision.

The Department is also considering an apprenticeship requirement for individuals wanting to start an applicator business. This will be another avenue to upgrade the standards in the industry.

The Department currently has the authority to develop the programs in the regulatory process and is committed to do so. The cost of the upgraded, verifiable Operator program would be approximately $90,000 annually for 2 staff employees administering the courses, including operating expenses.

Home Inspection Program (Number 6, Page 5) - The Department supports the regulation of home inspection businesses responsible for structural inspections for wood destroying insects such as termites. There is currently no control over these businesses which have major responsibilities in providing correct recommendations regarding insect presence and treatment requirements. Inspections are performed as part of nearly all real estate transactions in the State. A certification program to ensure the inspector's competency would be developed as well as an enforcement initiative to check the inspectors "in the

field". Two staff positions would be needed for certification and two investigators for enforcement, in addition to operating expenses. This cost would be approximately $200,000 annually.

Aerial Applications (Number 7, Page 6) - The Department currently has the authority to limit aerial applications if deemed necessary. The concept of not allowing the use of chemical pesticides over residential areas by the aerial method must be addressed with caution. There is a potential for introduction of more pesticides into the environment and greater human exposure by increased ground applications and homeowner use under heavy pest pressure conditions. In addition, this provision may limit the use of new products in the future, which may have very positive characteristics.

The proposed new section in the Bill does provide exemptions to the limitation of aerial use under emergency pest conditions. However, the language provides for public input prior to enacting the emergency exemption and application. The Department opposes this requirement due to the time constraints inherent in an emergency situation, constantly placing the Department in a defensive position. Instead, the Department suggests that a strict set of guidelines be developed by the Department which would trigger the emergency exemption with no delay or debate. Of course, all public notification requirements would be enforced. Also, the language in the section should be amended to read .....health or environmental emergencies or agricultural emergencies, giving broader context to the meaning.

Notification (Number 8, Page 6) - The Department is currently regulating this issue under N.J.A.C. 7:30 - Subchapter 9 of the Pesticide Code and is committed to upgrading the regulations as demonstrated in the new regulation revisions recently adopted. The Department's goal is to develop workable, enforceable regulations which meet the objective of notifying the public regarding pesticide applications. The authority is already established and thus an amendment to the law is not necessary. Directing counties and municipalities to assist in carrying out notification requirements would require funding grants to such governing bodies. It is difficult to determine the costs of such a program without knowing the specific requirements and attendant work plans.

The Department does however suggest an amendment which broadens the authority to require owners and responsible parties of public buildings such as restaurants, hotels and office complexes to maintain pesticide notices when applicators are required to post such notices in these facilities. Currently the law solely provides authority over the applicator businesses regarding notification responsibilities.

Gypsy Moth Permits (Number 9, Page 6) - The Department is researching this issue, and currently has the authority to enact such a program. The provision is not necessary. The Department requires assistance from the Department of Agriculture to provide input regarding field surveys and thresholds prior to spraying.

In addition, to administer the permit program, the Department would require one staff person plus operating costs of approximately $70,000 annually.

Farm Worker Protection (Page 7) - The Department is the lead agency in regulating worker reentry times, protective clothing, posting and notification procedures. Such requirements are in N.J.A.C. 7:30 - 9.13 of the Pesticide Code. The authority is established in the current law with regard to items listed above and thus is not necessary in the bill. Also, it must be noted that the Federal Environmental Protection Agency is currently formulating comprehensive agricultural worker protection standards which will be proposed in the near future.

Section 10 - The Department is mandated under this bill to develop and distribute forms to farmowners for each application of pesticide applied on the farm crops. The Department agrees with the concept of this Section, although it may be costly and may not be fully effective. The Department suggests deleting or amending (language provided) this section as the Department already enforces an effective posting requirement. By requiring the additional proposed posting procedures, the complexity of information provided may defeat the purpose of informing farmworkers in a clear and understandable fashion, as currently is the case.

Section 11 - The Department is currently performing the role of providing informational pamphlets to farmworkers relating to safety, safety equipment, health symptoms and preventative practices in the field. This function should remain with the DEP. The Department has developed a pamphlet in both English and Spanish regarding these topics and has been distributed to farmworkers in New Jersey and Puerto Rico. The Department suggests consultation with the DOH when including health related information in the pamphlets.

Section 12 - The Department currently has a posting requirement in the Pesticide Code designating treated fields and reentry times. The language in the bill requires additional posting in a central location visited daily by all farmworkers. In many farm situations, there may not be one central location. There may be various assembly points throughout the farm, or direct entry from buses to the fields. Also, Material Safety Data Sheets, which are required to be available to farmworkers as per the bill amendment, are often complex and not very useful to the lay person. These sheets are written only in English. Perhaps a fact sheet or "crop" sheet as developed in Texas may be more useful and informative to the farmworker.

Section 13 - The concept of training farmworkers is supported. If adopted, the training program must be verifiable in order to ensure that training did in fact take place, a task which may be difficult to accomplish. The certification and training of farmowners has traditionally been the responsibility

of the DEP, not DOH. It is our recommendation that the Department continue the role of training farmowners and suggests consultation with the DOH regarding health related topics. Much of the content of the training requirement is currently performed by the DEP in its ongoing certification program. One staff member plus operating costs will be required for the Department to implement the farmworker program, including training and educational material development. This would cost approximately $50,000 annually.

Medical Education and Reporting (Number 14, Page 8) - The education of medical providers and physicians and the reporting of pesticide exposure incidents is a concept the Department supports. This is an important function for the DOH to implement.

Communication Between Departments (Number 15, Page 9) - A reporting scheme between the DEP and the DOH is currently in place. This provision is not necessary in the bill.

Refusal of Entry (Number 16, Page 9) - The Department supports the right of the farmworker not to enter a field prior to termination of the minimum reentry time. The current regulatory code specifies reentry times and mandates that farmworkers shall not be permitted to enter the field prior to the reentry time.

Job Protection (Number 17, Page 9) - The Department supports protecting a worker from being discharged from employment for exercising his or her rights under the Act. These rights should

also include submitting complaints and requesting services of the Department.

Legal Action Against Departments (Number 18, Page 9) - The Department opposes spending valuable time and resources in court defending against anyone filing suit based simply on a perception that the agency is not doing its job. Since civil action may currently be brought by any party, this encouragement of civil suits is counterproductive and should be eliminated.

Funding (Number 20, Page 11) - The Department supports the use of the fee program to help support the services provided by the DEP. Currently, most other states are using the same mechanism to generate the necessary resources. A separate funding source must be established for the DOH to carry out its responsibilities.

Enforcement and Penalties (Number 21, Page 12) - The Department supports amendments upgrading enforcement procedures which provide additional incentive for compliance of the statute. Appropriate language will be suggested to attain an effective enforcement program.

The Department supports raising the maximum penalty to $25,000 which is comparable to levels set in other environmental statutes.

The Department supports the provision requiring penalties to be placed in the Environmental Services Fund to help support the pesticide programs.

SUMMARY

Though the current law is broad in scope and provides great regulatory latitude, there are additions and revisions which would strengthen and upgrade the law to improve services regarding protection to health and the environment. Job protection for "whistleblowers," medical education, incident reporting, home inspection program, penalty upgrading, and establishment of funding sources are examples of how the law can be improved to help the various departments meet their goals and objectives.

The total funding necessary for the Department to implement the new programs and responsibilities outlined in this bill is approximately $620,000. This does not include the additional funding needed to maintain and improve the services of the programs currently in place.

Again, thank you for providing the opportunity to present our views on the proposed legislation. My staff will be available to you to discuss these issues.

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
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New Jersey Department of Environmental Protection
Division of Environmental Quality

Suggested amendments to S-3741 - "An Act concerning pesticides, amending and supplementing P.L.1971, c.176, and amending P.L.1981, c.538.

(Page 1, Number 1)

Suggested amendment (6.a) to read:

"6.a There is created in the department a Pesticide Control Council which shall consist of [14] 15 members,...and [11] 12 citizens of the State representing the general public to be appointed by the Governor, to serve at his pleasure. Of these members, one shall be appointed....; one from persons [holding an M.D. degree and] trained in occupational safety and health,....; one from persons [with training and experience in organic farming recommended by recognized organizations of organic farmers] employed by a local or county health agency under agreement with the department in accordance with the County Environmental Health Act (P.L. 1977,c.443 (C.26:3A 2-21 et seq.); one from persons [recommended by recognized environmental organizations] with expertise in fish, game and wildlife areas, recommended by recognized wildlife organizations;...; [and] one from persons recommended by recognized public interest organizations; and one from the pesticide manufacturing sector recommended by industrial or trade organizations".

(Page 3, Number 3)

"3. (new section) The council shall prepare and submit to the [Governor and the Legislature] Commissioner an annual report...".

(Page 4, Number 5)

Delete Section 5 as this nearly duplicates existing regulations (or revise Section 5 to conform with existing regulations of N.J.A.C. 7:30-6.2(a).

(Page 6, Number 7)

Delete Section 7 or amend to read as follows.

"7. (new section) No person may aerially apply any broad-spectrum chemical pesticide on land not actively devoted to agriculture or horticultural use except in accordance with departmental regulations, or in the case of mosquito control where the department determines that no practical alternative is available, or in the case of other health or agricultural or environmental emergencies. In the event of a health or agricultural or environmental emergency.....grant an exemption. Upon granting the exemption, the department shall make available a separate written report, within 30 days of granting the exemption, setting forth the....the immediate action. The department shall also make every attempt to notify the general public and interested citizens [for input prior to the aerial application]."

(Page 6, Number 8)

Delete Section 8 from the Act as this is unneccessary under current regulations and can be carried out through counties under the County Environmental Health Act.

A suggested amendment to broaden the departments authority to require notification would be as follows.

"8. (new section) The Department shall adopt rules and regulations establishing notification requirements to afford people who may be exposed to pesticides the opportunity to minimize their exposure. Such notification requirements may include requirements for posting of notices during pesticide application, requirements for owners and responsibe parties to maintain pesticide notices for an specified period of time, and any other requirements deemed neccessary by the department to minimize pesticide exposure through notification requirements."

(Page 6, Number 9) - Delete Section 9 as the Department currently has this authority and is researching the creation of such a program through current authority and regulation.

(Page 7, Section 10) - Delete section 10 or amend to read as follows.

"10. (New section) The Department shall adopt rules and regulations to require farmowners to complete forms prepared or approved by the Department upon which shall be printed, in English and Spanish, the following information: the crop, the pesticide applied to that crop, the reentry date and time for safe reentry to treated fields, and the exact date and location of application. The farmowners shall complete the form whenever pesticides are applied to his land and shall post the form as specified in Section 12 of P.L. _____ (now before the Legislature as this bill)."

(Page 7, Section 11) - The section should be amended to read as follows.

"11. (New section) The [Department of Health] department, in consultation with the Department of Health, shall prepare pamplets,.....other state and federal laws".

(Page 7, Section 12) -

Delete Section 12(a) and (b) or amend to read as follows.

"12. (New Section) a. Every farmowner....this bill).
b. Every farmowner shall post the completed record of application forms in a central location, or at various assembly points throughout the farm, or at any other location to ensure that farmworkers who work in the fields can daily see the application forms [visited daily by all farmworkers who work in the fields].
c. Every farmowner.... premises.
d. The farmowner shall also maintain a Material Safety Data Sheet or a simplified fact or "Crop" sheet, approved or developed by the department, on each pesticide product used on crops..... upon request."

(Page 7, Section 13).

Suggested amendment to read as follows.

"13. (New section) Every farmowner....premises. The training shall be conducted by a person certified as a trainer by the department [Department of Health]. The training....these agencies."

Add after last sentence:
" The trainer requirements and course content will be designated by the department, in consultation with the Department of Health."

(Page 9, Number 18).

Suggest deleting this Section as civil suits may already be brought against the Department and this stipulation to encourage civil suits could be counter-productive to the program, could cause the department to spend valuable time and resources in Court, and could cause courts to resolve issues which are best handled through administrative or regulatory means or through legislative oversight.

(Page 12, Number 21)

Suggested amendments to read as follows.

"b. Any person who violates the provisions of this act or any rule, regulation promulgated or order [promulgated] issued pursuant to this act shall be liable to a civil administrative penalty of not more than $25,000 for each offense, [to be collected in a civil action by a summary..... "the penalty enforcement law".] If the violation is of a continuing nature, each day during which it continues [subsequent to an order to cease the violation] shall constitute an additional, separate, and distinct offense.

Pesticide Control Report

Pesticide Control Program
Division of Environmental Quality
New Jersey Department of Environmental Protection

SPRING, 1989 VOLUME 5, NO. 2

The Pesticide Control Report is the newsletter of the Pesticide Control Program, CN 411, Trenton, NJ, 08625. Where trade names are given, no discrimination or endorsement is implied or intended.

The main topic of this issue will focus on the revised regulations, especially the new notification requirements, starting on page 2.

RESTRICTED USE PESTICIDES

Under the provisions of N.J.A.C. 7:30-2.3(a)1., the Pesticide Control Program can classify pesticides as restricted-use based on label statements which indicate that the products are intended for use by certified pesticide applicators. A review is conducted of each pesticide product that contains statements which may apply.

Recently, 85 products were reviewed and 1 was classified for restricted-use. That product is as follows:

EPA REGISTRATION NO.	BRAND NAME	DATE EFFECTIVE
SLN-NJ-880002	Malathion ULV Concentrate Insecticide	1/22/89

[Ralph C. Smith, Chief, Bureau of Pesticide Operations]

DINOSEB DISPOSAL BY EPA

Recent rulings by the U.S. Environmental Protection Agency have cancelled almost all uses of pesticide products that contain dinoseb. Those actions make such uses illegal.

If you own any dinoseb product, you may be able to get back some of the money that you paid for it, or, have the product legally and safely disposed of by EPA.

Even if you were not eligible for this program under a similar, earlier action, you probably can qualify now. To learn how to take advantage of the offer, telephone EPA toll-free at 1-800+DIN-OSEB. There are some deadlines that must be met in order to qualify, so do not wait. Call right away.

[EPA Radio Spot, March, 1989]

PESTICIDE APPLICATIONS IN OR AROUND SCHOOLS

Section 10.3(o) was added to Subchapter 10 in the revisions adopted on 11/21/88 and became effective on 3/1/89. That section states pesticides, except for rodenticides, roach baits, and antimicrobial agents, cannot be applied in or around schools, grade preschool through 12, during normal school hours.

The intent of this section is to help minimize school children's exposure to pesticides. A strict following of this section in some cases may actually increase possible exposure. Some school buildings and grounds are not normally used during normal school hours. Examples include: Athletic fields such as the fields used by the school's official teams, that are only used for practice after school and for official contests; schools with their own golf courses; schools with residential facilities, such as dormitories. If these areas could only be treated after normal school hours, exposure could be greater since those are the times when those areas would most likely be utilized.

Therefore, the policy is as follows:

Athletic fields (including golf courses) which are not utilized by school children during normal school hours can be treated during normal school hours. Residential areas for students can also be treated during normal school hours, since they are not normally occupied during the school's instructional periods. Structures that are separate from any structure utilized by school children during normal school hours, that will not be utilized by school children during normal hours, may also be treated.

All of the above exceptions apply if the criteria described are satisfied on the day of treatment. For example, a separate structure utilized on Wednesday by school children during normal school hours can be treated on Monday if the structure is not utilized during normal school hours on that day.

[Ralph C. Smith, Chief - Bureau of Pesticide Operations]

NOTIFICATION GUIDELINES AND SAMPLE FORMS ON FOLLOWING PAGES

Which specific type of H/S notification should be done?

There are different requirements for single family residences (SFR), multi-family residences (MFR), and commercial buildings. Within the commercial building area there are specific requirements for health care facilities; restaurants; hotels/motels; schools, places of worship and other public meeting places; commercial work places; and large public places such as malls, stores, airports, bus terminals, etc. The following examples indicate what specific type of H/S notification is required:

-Any residence where the occupant is not the person contracting for the service is considered a MFR and thus the 48 hour prenotification is required.
-Housing for students, dormitories, etc. are considered MFR and treatments of the rooms where the students actually reside require the 48 hour prenotification.
-In structures with multiple residential units, any common area treated (such as hallways, laundry rooms, lobbies, lounge areas, etc.) requires commercial building-public meeting place (9.10(c)3.iv.) notification only.

The MFR notification procedures, including the 48 hour prenotification, are required only if the actual areas rented or owned by the residents are treated. These areas include the actual living areas as well as any storage areas. Also, a crawlspace or soil under a slab that is treated under a particular unit is the same as if you went into that unit and drilled the floor or did surface applications; all require MFR notification.

-Correctional facilities are not considered MFR, since the prison management has complete control over the inmates. Therefore, the H/S notification required is that for commercial buildings-public meetings places.
-Commercial buildings-health care facility notification is for hospitals, clinics, doctor and dentist offices, etc. For facilities with more than one nurse's station (multiple floors, wings, departments, etc.), posting should be done at any nurse's station that has an area it is responsible for that has been treated. If a health care facility has no true "nurses" station, then the reception area should be posted.
-Any food handling facility that is required to have a health department inspection certificate requires commercial building-restaurant notification. The required posting goes by the health department certificate. Examples include restaurants, food and liquor stores, social clubs, etc.
-Commercial building-hotel/motel notification is for those short term residential facilities where there is a registration desk. If there is no registration desk, it is considered a MFR and thus 48 hour prenotification is required for treatment of rooms.
-Malls, stores, airports and other large public places are those buildings with no central bulletin boards for posting, where there is a lot of transient traffic. Note that other types of H/S

GUIDELINES FOR NEW NOTIFICATION REGULATIONS

The following policies are guidelines for the notification regulations in NJAC 7:30-9, sections 10,11 and 12, which were adopted on 11/21/88 and became effective on 3/1/89. All of these policies were reviewed and approved by the management of the Pesticide Control Program. These guidelines should be used as a supplement to the actual regulations.

What type of applications are covered?

-Only commercial applications, which are applications performed by applicators who are required to be Commercial Certified Pesticide Applicators, or by someone working under the direct supervision of one. Private Certified Pesticide Applicators are not covered by these regulations.
-Only commercial applications generally covered by the following commercial categories: 3A-Ornamentals (except for tree injections); 3B-Turf; 3C-Interior Plantscaping; 7A-General Household & Structural; 7B-Termites & Other Wood Destroying; 7C-Fumigation; 7D-Food Processing; 8A-General Public Health (except for health department officials during the normal course of their duties); and 8C-Campground. Not covered are agricultural, forestry, aquatic, right-of-way, antifouling, mosquito, cooling tower, antimicrobial, pet grooming, demonstration & research, and all aerial applications. Also not covered are applications to buses, automobiles, planes, and ships, since these mobile "structures" present situations not addressed in the current notification regulations. They may be specifically addressed in the future.

Household or structural notification versus turf or ornamental notification - which is to be used?

There are some situations where it may be difficult to determine whether household or structural (H/S) or turf or ornamental (T/O) notification should be done. You have to look at the site being treated to decide. If the site being treated is a lawn area, tree or shrubbery, then you should do T/O notification. If the site being treated is not primarily a lawn area, tree or shrubbery, then do H/S notification only. Some specific examples follow:

-A carpenter ant treatment includes a perimeter spray around the structure, as per label directions. Only H/S notification is needed.
-The above carpenter ant treatment also includes spraying shade trees. T/O notification is then necessary.
-Lawn areas, shrubbery, brushy areas, etc. are treated for fleas or ticks. T/O notification is necessary.
-A wasp nest in a tree is treated, but the rest of the tree is not. Only H/S notification is thus needed.

owners, then whoever contracted for the treatment gets the H/S notification. Please note that in situations where a management company, condo association, etc. is contracting services for members, that the individual properties being treated, even if owned by the occupants, require MFR notification, since the individual owners are not contracting the service themselves.

For both H/S and T/O notification, does the written notification information and/or postings have to be in any language except English?

No, only English is required. It is hoped that a Spanish, etc. translation will be provided in ethnic locations, but it is not mandatory. The T/O notification signs and the large public place H/S notification signs are required to have specific international signage illustrations to aid in getting the message across to people who cannot read English.

For both H/S and T/O notification, what are the telephone numbers that are required to be included with the written notification information (Consumer Information Sheet)?

The telephone numbers required are for the NJ State Department of Health and for the NJ Poison Information and Education System. The numbers should be listed as follows:

-(609)633-2043 NJ Dept. of Health for general health inquiries concerning pesticides

-(800)962-1253 NJ Poison Information & Education System for pesticide emergencies

For both H/S and T/O notification, what does "proposed date" mean?

The proposed date is the applicator's best estimate of when the actual application will take place. An application does not have to be done just because a date was proposed. However, an application cannot be done unless there was a proposed date given. A proposed date cannot be so unspecific as to be meaningless. The following ranges or windows are allowable for proposed dates:

-For the 48 hour prenotification required for H/S treatments of MFR, the specific date must be given. However, one alternate specific date, which falls after the primary date, can be given as a back-up date.
-For all other proposed dates, the range is 15 days. That means a treatment can be done up to 14 days after the date proposed, but not before.

For both H/S and T/O notification, does the written notification that goes to the contracting party have to be given before each application?

This notification can be done once to cover an entire application season, or several times a season, or before every application. It should be done, however, at least once a year. The longer the period the notification covers, the more complicated will be the

notification and posting may still be required in these large public places, such as for treating individual restaurants, office spaces, etc. An example of this would be a large office building, which has multiple business tenants & a cafeteria. The treating of the common areas would qualify for "large public place" posting, while the treating of the cafeteria would require "restaurant" posting, and treating office spaces would require "commercial work place" posting.

-Restrooms & other facilities at parks and picnic areas that are treated require the H/S notification and posting for commercial buildings-public meeting places.

-Aerosol space treatments require the same notification as for MFR to all attached or adjoining structures or rooms that will be occupied at the time of treatment (Please note that "time of treatment" as used above includes the holding period). This means structures or rooms that share a common wall, floor, or ceiling. The MFR notification requirements also apply if the room or structure treated share a common air handling system with other rooms or structures. Note that the use of fumigants is not included here. That is because adjoining or attached structures or rooms would have to be part of the treatment site to legally be done. With aerosol space treatments that is not always the case.

Which specific type of T/O notification should be done?

The type of T/O notification required is fairly straightforward, and is similar for all T/O applications, except for golf courses.

-Golf courses which rent or lease residences which they own are required to do the T/O notification & posting for golf courses on grounds used by the golfers and MFR notification and posting on grounds considered part of the residential property. There is always some demarcation between those areas where golf is played and where an area around a residence is used as a yard.

For both H/S and T/O notification, who is this "contracting party" an applicator business is supposed to notify?

In all cases where a Pesticide Applicator Business is doing a treatment, there will be a customer, or "contracting party". Whoever is arranging for the treatment to be done is the contracting party. This is very obvious in most cases. Some of the not so obvious cases follow:

-Who is the contracting party when pre-construction termite treatments are done? It will be the developer, builder, or the owner of the building, whoever is arranging for the treatment to be done.

-For SFR, it says to provide the residents, not the contracting party, with the H/S notification information. In all other sections (besides H/S notification for MFR), including T/O notification for SFR, it says to notify the contracting party. It is assumed that the "resident" of a SFR is the contracting party. If the resident is not the contracting party, then the H/S notification for MFR is required. If there is no occupant of the treated property, such as in pre-construction treatments or where a real estate company is having a house treated between

notification. If a season long notification is done, make sure the 15 day range for proposed dates is used and that all pesticides to be used and their customer precautions, are listed. If there are any changes, such as a new proposed date or pesticide is added, or additional label precautions are needed, then another notification must be done. There is no time limit as to how far in advance of an application this notification has to be made. You merely must give the contracting party enough time to read and understand the notification, and the opportunity to receive and read pesticide labels, if so requested.

What about this 48 hour prenotification for H/S treatments of MFR?

Any residence where the contracting party is not the occupant of the residence is considered a MFR and thus requires 48 hour prenotification, if the residence to be treated is going to be occupied on the treatment date ("occupied" means that the residence has been rented or leased for that date and may or may not be actually physically occupied).

The 48 hour prenotification must list the specific date treatment is to take place, with one alternate date (after the primary date) allowed. If you choose to list an alternate date then you must tell the recipient, in the 48 hour prenotification, the procedure you will use to inform them if the alternate date will be used. That procedure is as follows: If you do the treatment on the primary date, then leave a notice in the treated residence stating that fact. If no notice is left, the occupant of that residence can expect treatment on the alternate date.

The prenotification must also list the specific pesticide(s) to be used, along with the specific label precautions for the resident's safety. However, since in some cases the specific pesticide to be used cannot be determined until the applicator is at the treatment site, the following alternative is allowed: A written notice stating what specific pesticide was used, along with any applicable label precautions, can be left in the treated residence at the time of application. This notice can substitute for not naming the specific pesticide in the 48 hour prenotification. However, the specific pesticide actually used must be included as one of the possible pesticides likely to be used and listed as such on the 48 hour prenotification.

What about waivers to the 48 hour prenotification for H/S treatments of MFR?

There are two waivers from the 48 hour prenotification for MFR. One is if the local health agency declares a health emergency and requires immediate treatment. The other is if the resident signs a waiver, allowing treatment without a 48 hour notice. However, that 48 hour prenotification waiver is subject to the following:

-All notification information required by the 48 hour prenotification must still be given to the resident.
-A waiver is required for each application. No blanket or season-long waivers!
-A resident of the unit of legal age (18 years or older) must

sign the waiver.
-If there are no residents of legal age (possible in school dormitories) then any resident of that unit may sign the waiver.

What about posting for T/O notification (except on golf courses)?

The posting requirements are fairly straightforward. Some guidelines:

-The specified signs must be posted before application starts and must remain up at least 24 hours but no more than 72 hours thereafter. The 24 hour posting period may be longer if label reentry times are specified on the pesticide label. The applicator may delegate, in writing, the removal of the signs to the contracting party.
-When posting treated properties other than SFR, post the principal access points to each specific area that has been treated, not just the principal access point to the property.

What about T/O notification for golf courses?

Since golf courses are treated extensively with pesticides and golfers are thus potentially exposed, the T/O notification requirements for them are different. The following are guidelines:

-The permanent signs required at all starting tees do not have to be maintained (remain legible) between January 1st and the first application of that year.
-The permanent signs must have the words "PESTICIDE TREATED AREA" in letters at least one inch high, but the other information required merely has to be legible to someone standing in front of and reading the sign (typewritten page acceptable).
-The permanent signs must provide date of last application, areas treated (holes treated), pesticides used, and proposed date of next application for each of the following three areas for the holes covered by that starting tee: 1) tees and fairways 2) greens 3) roughs. If a green is treated, but not a fairway or rough, then only the information for the greens is changes. The fairway and rough information remains as it was.
-The golf course management must provide further information on the pesticides used if requested by the golfer.

A FINAL NOTE

Remember, these guidelines do not address the parts of the notification regulations which are self-explanatory. These guidelines only address those "gray" areas where interpretation and clarification was needed.

[By Ralph C. Smith, Chief - Bureau of Pesticide Operations]

ONSUMER INFORMATION SHEET - TURF AND ORNAMENTAL APPLICATIONS

pplicator/Business Name: _____
ddress: _____
hone: _____

ear Customer:

As of March 1, 1989, the New Jersey DEP, Pesticide Control Program instituted a new rogram that requires us to provide customers with information about the materials that we ill be using as part of the pest control program for your property. We are using this onsumer information sheet to provide you with this information. The accompanying sheet ists any label precautions for the pesticides listed below that you should be aware of. We ill apply the pesticides listed below to your property within fourteen (14) days of the ate(s) listed:

RAND NAME	CHEMICAL NAME	PROPOSED DATE OF APPLICATION

You will also notice that, following each application, at least one sign will e placed on your property that says PESTICIDE TREATED AREA and contains the inter- ational signage for keep off the grass. We are required to do this as part of the ew program. The sign(s) must remain in place for at least 24 hours following the pplication and we are responsible for removing the sign within 72 hours following pplication. We would appreciate it if you would remove the signs for us. As the ustomer, you should also be aware that you may request notification of the exact late(s) of our applications and for a copy of the label for each pesticide that we ill use.

We are also required to provide the following phone numbers for your use in the vent you have any health related questions concerning the materials that we will be sing:

EW JERSEY DEPARTMENT OF HEALTH:	(609) 633-2043	For general health questions
EW JERSEY POISON INFORMATION & EDUCATION SYSTEM:	(800) 962-1253	For emergency situations only
EW JERSEY PESTICIDE CONTROL PROGRAM	(609) 530-4070	For pesticide regulatory information

Pesticides are chemical substances used to control living organisms and vary in degree of toxicity. Pesticides may be part of a good pest control program. Sanitation, as well as physical and biological control measures, should be considered as another part of a good pest control program.

- -

As the customer, I hereby certify that _____ has provided me, in writing, all the information required under the NJDEP Pesticide Control Program's notification program. I have read the information supplied and understand my rights and responsibilities under this program. I also agree to remove the notification sign(s), that they will post on my property, no sooner than 24 hours following each application and no later than 72 hours following the application.

Signed: _____ Date: _____

Please sign and return this portion of the Consumer Information Sheet to us for inclusion in our records.

25X

NOTIFICATION AND CONSUMER INFORMATION SHEETS

As I am sure everyone knows, the notification regulations adopted in November of 1988 will begin to be enforced on March 1, 1989. Because of this fact, the Pesticide Control Program has received numerous requests to review and approve notification and Consumer Information Sheets developed by various people and organizations.

Due to the fact that we did not have the opportunity to review and approve all of the forms sent to us, we decided to publish two acceptable forms.

The first was submitted by Dr. George Hamilton, Pesticide Extension Specialist at Cook College and addresses turf and ornamental applications. The second was submitted by the New Jersey Pest Control Association and addresses structural applications. These forms have been slightly modified and we have added the Program's information number to the form, which is not a madatory requirement. The two forms are on the following pages.

When using these forms it is important to note that if you are going to supply the customer with a list of pesticides along with their precautions, the customer must be informed in writing prior to the application which pesticide is going to be used in order that the customer has sufficient time to review the information provided and the appropriate precautions can be taken.

It is also important to note on the structural application form that if additional precautions are indicated on the label, other than those mentioned on the form, these precautions must be related in writing to the customer prior to the application so that, again, the customer has sufficient time to review the information provided and the appropriate precautions can be taken.

These are only two examples of notification forms and they may or may not work for you or your business. However, it is important to remember that if you provide the required information in any form (as long as it is written) it will be acceptable to the Department.

For the household and structural Consumer Information Sheet, please note that your business name, address, and phone number must be included.

Also provided is an example of the posting required for commercial, public, and institutional buildings.

[John J. Pitonyak, Jr., Principal Environmental Specialist]

FOR YOUR PROTECTION PEST CONTROL SERVICES ARE PERFORMED HERE

Pesticides which may be used are listed below.

For further information, contact _____

phone _____

CIRCLED DATES SHOW PAST AND PROPOSED APPLICATIONS

JAN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
FEB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
MARCH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
APRIL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
MAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
JUNE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
JULY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
AUGUST	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
SEPT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
OCT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
NOV	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
DEC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Brand Name		Common Chemical Name	Application Date
Dursban	( )	Chlorpyrifos	_____
Ficam	( )	Bendiocarb	_____
Diazinon	( )	Diazinon	_____
Tempo	( )	Cyano	_____
Demon	( )	Cypermethrin	_____
Safrotin	( )	Propetamphos	_____
Perma-Dust PT 240	( )	Boric Acid	_____
Talon	( )	Brodifacoum	_____
Maki	( )	Hydroxycoumrim	_____

The following information is being given to you in conjunction with the New Jersey Department of Environmental Protection Regulation 7:30-9.10. It is designed to inform you of important information concerning safety and treatment using pesticides.

Pesticides are chemical substances used to control living organisms and vary in degree of toxicity. Pesticides may be part of a good pest control program. Sanitation, as well as physical and biological control measures, should be considered as another part of a good pest control program.

Parties interested in general health information may contact the New Jersey Department of Health at 609-633-2043. For emergency situations contact the New Jersey Poison Information and Education System at 800-962-1253. DEP's pesticide information number is 609-530-4070. A copy of the label of pesticides used can be requested thru the contracting firm.

During any application of pesticides humans and pets should not contact treated surfaces until the spray has dried. Cover or remove all food and food processing equipment during application if necessary. Food processing equipment and food-contacting surfaces should be washed following application if the pesticide has contacted them. Ventilate the area following treatment. Do not reenter areas treated with a space application until advised by the applicator.

The following information is given for your benefit: Proposed date of application----see calendar schedule or date:_____

For pesticides which are regulated with the New Jersey Department of Environmental Protection and which may be used, see list.

In multiple housing units, this information must be provided to tenants at least 48 hours prior to the first application.
In commercial accounts a permanently posted notice as provided by the applicator must be installed.

I, the undersigned, have read and understand the above information.

_____

This information was prepared by the New Jersey Pest Control Association and has been approved by the New Jersey Department of Environmental Protection.
Additional chemicals may be added at a future date.

BRAND NAME			COMMON CHEMICAL NAME
Dursban	( )		Chlorpyrifos
Ficam	( )		Bendiocarb
Diazinon	( )		Diazinon
Tempo	( )		Cyano
Demon	( )		Cypermethrin
Safrotin	( )		Propetamphos
Perma Dust PT240	( )		Boric Acid
Talon	( )		Brodifacoum
Maki	( )	26x	Hydroxycoumrim

48 HOUR PRENOTIFICATION FORM

Below is an example of what will suffice for the 48 hour notification waiver. Naturally, other formats are feasible which will also comply with the regulations, but note that this waiver also requests pest control service, which the regulation specifies must be done.

PEST CONTROL NOTIFICATION WAIVER

I understand that by completing this form I request pest control services and waive the 48 hour prior notification for this application.

_____
Print Name

_____
Service Address

_____
City State Zip Code

_____ _____
Signature Date

[By John Orrok, Principal Environmental Specialist]

ปิ๊กจัก ภยันตรายจาก ยา ฆ่าแมลง

ถ้าท่านจำเป็นต้องใช้ยาฆ่าแมลง ท่านจะถูกกับยาฆ่าแมลงได้อย่าง.

ยาฆ่าแมลงมีแหล่งใดบ้าง?

ยาฆ่าแมลงมีเป็นหลายประเภท จึงใช้ได้กับแมลง, ตะกาดหลายชนิด, ตัดหญ้าเป็นประโยชน์และพืชต่างๆ. ยาฆ่าแมลงมีเป็น ผง ของเหลว. เราควรจำไว้ว่ายาฆ่าแมลงมีหลายอย่างที่เราซื้อมาใช้ในครัวเรือนได้. มีหลายอย่างจะมีผลต่อสุขภาพของเราได้ ถ้าเราใช้ไม่ถูกต้อง.

ถ้าเราไม่ระมัดระวังเกี่ยวกับการใช้ยาฆ่าแมลงอาจเป็นอันตรายต่อคุณได้ เช่น ตาย, ป่วย, ตาบอด และไม่สบาย.

ยาฆ่าแมลงมีหลายอย่างเข้าไปในร่างกายเราได้อย่างไร?

ส่วนใหญ่เราอาจจะได้รับหรือไปจากอาหาร ถ้าเราไม่ระมัดระวังอาจจะได้รับหรือไปจากน้ำดื่มหรือในขณะที่ทำงาน. เช่นผู้ที่ฉีดยาฆ่าแมลงหรือผู้ที่ไปจากอาหารอาจจะเข้าทางผิวหนังได้ง่ายกว่าคนอื่นๆ. เช่นกัน ยาฆ่าแมลงมีหลายชนิดที่ไปจากอาหารอาจจะเข้าทางผิวหนังของเรา. ยาฆ่าแมลงมีหลายชนิดที่ไม่ควรสูดดมเข้าไป.

- ถ้าเราไม่ใช้ยาฆ่าแมลงตามที่ระบุไว้ในฉลาก หรือใช้ยาฆ่าแมลงมากเกินไป เราอาจจะเจ็บป่วยได้.
- ยาฆ่าแมลงไม่สามารถเข้าไปในร่างกายของเราได้ถ้าไม่ผ่านทางอาหาร, น้ำดื่ม หรือทางผิวหนังของเรา. ถ้าเราใช้ยาฆ่าแมลงแล้วรู้สึกไม่สบายให้รีบไปหาหมอทันที.
- และอีกทางหนึ่งสามารถเข้าไปทำลายสุขภาพของเราได้อีกทาง.

ยาฆ่าแมลงบางชนิดใช้ได้ผลดี ถ้าเข้าไปในร่างกายของเราแล้วจะทำลายเราอย่างรุนแรง. ถ้าเข้าไปในร่างกายจำนวนน้อยก็ทำลายมันก็ทำลายเราได้เช่นกัน.

ปัจจัยอะไรบ้างที่จะทำให้เราเป็นอันตรายจากยาฆ่าแมลง?

ยาฆ่าแมลงแต่ละชนิดจะมีอันตรายต่างกัน บางชนิดจะเป็นอันตรายมากกว่าชนิดอื่นๆ. ตารางข้างล่างนี้จะแสดงให้เห็นว่า:

ดีมาก	ดีพอสมควร	ปานกลาง
ไม่ดี	อันตราย	อันตรายมาก
เป็นพิษ	ร้ายแรง	หน่อยหนึ่งน้อยๆ.

ปัจจัยอะไรบ้างที่จะเป็นอันตรายจากยาฆ่าแมลง?

อันตรายที่ได้รับจากยาฆ่าแมลงไปจะขึ้นอยู่กับ, ความเข้มข้น, ความเป็นพิษ, ระยะเวลาที่ได้รับ และเป็นอันตราย. ยาฆ่าแมลงบางชนิดจะทำให้เราอาเจียน, ระคายเคืองในทางเดินอาหาร และจะเป็นอันตรายต่อร่างกายของเราอย่างมากต่อไป. ยาฆ่าแมลงบางชนิดจะทำให้ผิวหนังอักเสบ, คันมาก, แดง, เป็นผื่น และบวมขึ้นมาได้. เมื่อเราเป็นโรคภูมิแพ้จะจำอาจจะเป็นมากกว่าคนที่ไม่เป็นโรคภูมิแพ้. เราอาจจะถูกพิษโดยการดูดซึมเข้าทางผิวหนังได้.

ยาฆ่าแมลงมีหลายชนิด: ผิวหนัง, ผิวสัมผัสจะจับตาอาจจะเป็นอันตรายได้. ถ้าเป็นเราต้องไปที่ไหนและที่ทางที่ทำงานอย่างไรก่อน.

จำเราจะรู้ได้อย่างไรว่าเราได้รับพิษยาฆ่าแมลงแล้ว?

ต้องใช้เวลาหนึ่ง ที่เราจะมองเห็นอันตรายใดๆ. เราต้องทราบเป็นอาการอย่างไรว่าเราได้รับยาฆ่าแมลง ย่อมไปตรวจดู. ถ้าเราสงสัยว่าเราจะเป็นอันตรายได้รับการรักษา. ถ้าเราสงสัยว่าเราจะได้รับอันตรายจากยาฆ่าแมลงก่อน.

เมื่อเราจำเป็นต้องใช้ยาฆ่าแมลงเราจะทำอย่างไร?

- เมื่อเราจำเป็นต้องใช้ยาฆ่าแมลง เราควรจะอยู่ห่างจากยาฆ่าแมลง เราควรอยู่ห่างจากยาฆ่าแมลงให้มากที่สุด ถ้าเราจำเป็นต้องใช้ยาฆ่าแมลงให้ใช้ยาฆ่าแมลงที่มีพิษน้อยที่สุด ถ้าจะเป็นต้องใช้ยาฆ่าแมลงที่มีพิษมาก, ต้อง

FARMWORKERS AND PESTICIDES

If you pick fruits or vegetables you are probably regularly exposed to pesticides.

What are Pesticides?

A pesticide is any substance (whether liquid, gas, granulated or powder) which is used to kill plant diseases, insects, plants or rodents. Pesticides are poisions.

It is important to recognize that pesticides can kill or gravely injure a person. Some pesticides are more toxic or more dangerous than others.

Some pesticides are especially dangerous for pregnant women since they may cause birth defects in children born to women exposed to these pesticides.

How can pesticides enter your body?

Pesticides can be sprayed from the air by airplanes or by helicopters. Pesticides can be sprayed on the ground from tactors or by individuals with hand held applicators. Pesticide dusts or residues may also be on leaves or fruits you touch while working and can cause problems when they come in contact with your skin.

* If you swallow pesticides or eat or drink something containing pesticides, you will be effected
* Pesticides can also enter your body through your skin even if it is not cut or scratched
* Pesticides can also enter your body through the air you breathe

Direct exposure to pesticide sprays drifting onto you at the time they are applied can be particularly hazardous. Exposure to even very small amounts of some very strong pesticides is very dangerous.

What are signs of pesticide poisoning?

Direct exposure to some pesticides can cause serious illness which requires immediate medical attention. Signs of this are:

Headaches	Tiny Pupils	Abdominal Cramps
Sweating	Dizziness	Blurred Vision
Diarrehea	Vomiting	Weakness

What are other dangers from pesticides?

Long term exposure to pesticides can result in insomnia, forgetfulness, loss of eye-to hand coordination, and persistent trembling. Some pesticides may result in cancer, birth defects, and genetic defects effecting future children.

Some pesticides can cause skin rashes or burn your skin. Your skin could become red, itch and water blisters may form. Eye redness and soreness can be caused by splashing a pesticide in your eye or rubbing your eyes with a sleeve or hand that has pesticide on it.

Skin rashes and eye irritation can become serious injuries and should be treated by a doctor.

What to do if you have been porsioned by pesticides?

See a doctor or hospital immediately. Be sure to tell the doctor you have been exposed to a pesticide at work. If you can, find out what kind of pesticide was being used from the farmer or crewleader. If you don't know have the doctor contact the farmer immediately to find out.

What can You do to Prevent pesticide poisoning?

* When working in an area treated with pesticides you should be wearing protective clothing. Protective clothing should consist at least of a hat or head covering, a long sleeved shirt, long trousers or coveralls that cover the entire body, including arms, legs, shoes and socks.
* Avoid spilling sprays or liquids on skin or clothing. If spilled wash immediately with soap and water. Waiting even a few minutes could allow the pesticide to enter your body.
* Avoid inhaling pesticides.
* Wash your hands and face and change to clean clothing after returning from work and, if possible, before eating.
* Wash protective clothing used when exposed to pesticides separately from other clothing before you wear them again. Keep clothing exposed to pesticides away from children or pregnant women.
* Do not enter fields while pesticides are being applied or before you have been told it is safe to reenter a field which has been recently sprayed. You should be warned by your crew leader or the grower of areas to avoid. Never enter a place treated with pesticides until the sprays have dried or the dust has settled unless you are wearing special protective clothing.

Where can you get help or information?

If you are concerned about pesticides and want confidential help or information contact:

MUTUAL ASSISTANCE ASSOCIATIONS

Cambodian Association Office
5412 North 5th Street
Philadelphia, Pa. 19120
Telephone: (215)324-4070,
(215)324-2611

Laotian Association Office
2120 South 7th Street
Philadelphia, Pa. 19148
Telephone: (215)465-9777,
(215)465-5680

Southeast Asian Mutual Assistance Associations
4039 Walnut Street
Philadelphia, Pa. 19104
Telephone: (215)823-5485,
(215)823-5486

LEGAL SERVICES

Community Legal Services, Inc.
Southeast Asian Refugee Project
Law Center West
5219 Chestnut Street
Philadelphia, Pa. 19139
Telephone: (215)471-2200

Friends of Farmworkers, Inc.
Legal Services for Farmworkers
3156 Kensington Ave., 7th Floor
Philadelphia, Pa. 19134
Telehpone: (215)427-4885

ENFORCEMENT AGENCY

Bureau of Pesticide Control
New Jersey Department of Environmental Protection
CN 411 380 Scotch Road
West Trenton, New Jersey 08628
Telephone (609)530-4146

This information is jointly produced by Friends of Farmworkers, Inc. and the Southeast Asian Mutual Assistance Associations.

Ngoui Lam Ruong Va Thuot Doc Pesticides

Nieu ban nho trai cay hoat be cai ti ban co the thoung bi nhiem thout doc (Pesticides).

Thu Gi La Pesticides? (1)

Pesticides la mot chat hoa hoc (co the la nouc, hoi ga hoat bang bot) do la thu de giet vi trung cay, hoat la, va de giet nhung. Con mot, hay la hung con chuot soc. v.v.v.

Do la rat quan trong cho cac ban de xet nhan thu thuot (Pesticedes), co the giet chet duoc hoat la rat nguy hiem cho cac ban, vai thu thuot (Pesticieds) co nhieu chat doc. Va can ngui hiem hon nhung thu khac.

Vai thu thuot Pesticieds that la nguy hiem cho nhung nguoi phu nu co thai, nhieu khi phu nu co thati ma bi tro ngai la bi hu thai tai vi nhung thuot nay gay ra.

Nhu the Nao ma thuot doc Pesticides Nhiem vao Nguoi(2)

Thuot doc Pesticides co the tuoi bang bay hoat la tuoi bang nhung nguoi lai xe may cay v.v.v.

Nhung khi bui bam host la can ba cua thuot Pesticieds thuong nam lai tren la, hay tren nhung trai trong luc ban dang lam viek, va no co the anh huong toi lang da cua ban.

Nhung thu hieu cua thuot doc Pesticides la Gi(3)

Trong luc ban bi tram vao thuot doc Pesticides thi thuong bi benh, can phai chua benh lap tuc, o duoi dang la nkuong chung benh ma anh hsiong den thuot doc Pesticides.

Nhut dem	trong mat nho	dau bung
Mo hoi	chong mat	mat lo
Bi tuoc	Oi, mua	yeu

*Ban se.bi anh huong neu ban an hoat uong nhung thi gi co chat Pesticides.

*Pesticides co the vao trong than the cua ban bang o lang da trong lue khong cang phai bi cat hay bi lo.

*Pesticides co the vao trong than the cua ban trang luc ban dang tho.

Trong luc dang tuoi thuot doc (Pesticides) ma vuong vao nguoi ban, thi rat la nguy hiem, khong can ich hoat la nhieu.

Con nhung gi Nguy Hiem Trong Thuot Doc Pesticides(4)

Nieu bi nhiem thuo doc Pesticides, trong thoi giang ngan hoat dai, no se anh huong den, mat nghu, ua quen, hai toi mat, tay hoat lau lau rung ray.

Vai loi thuot Pesticides co the anh huong toi cac ban, chang hang la ung-thu, hu thai, hay co the anh huong toi tre em trong tuong lai.

Vai thu thuot Pesticides. Lam cho ban nghua, phong, hoat do len. Nhieu luc ban vo y, vui vao mat bang tay ao co nhung thu thuot Pesticides nay, no se lam lang da ngua, hoat mat bi ngua

ban lap tuc phai di Bac Si nga,.

Phai lam gi khi Nhiem Thuot doc Pesticides(5)

Di vao benh vien lap tuc, va se cho Bac Si biet, ban da bi nhiem thuot doc Pesticides tai cho lam viec neu ban co the biet loai thuot cua Pesticides neu khong biet thi ban nho bac si lien lac voi chu vuong lap tuc.

Lam the nao khoi bi nhiem thuot doc Pesticides? (6)

* Khi ban lam viec nhung cho co thuot Pesticide thi ban can phai dau non, ao dai tay, quan dai, va mang day voi vo.

* Nieu ban bi thuot Pesticide tham vao lang da hoat o ao, thi ban lien rua bang xa phong, khong nen cham tre.

* Khong nen hit vao thuot doc Pesticides.

* Khong nen giac do chung nhung bo do khat va chanh xa ra nhung nguoi bi co thai hay la tre em.

* Khong nen vao nhung giveng trai dang tuoi thuot Pesticide. Ban khong nen vao tru khi thuot Pesticide da kho di hoat la bang do binh phuc rat la kinh dao de ngua di, thuot Pesticide nhiem vao nguoi

Noi Nao Ban Co The can giu va tim tinh tuc?(7)

Nieu ban co ban khoan voi thuot doc Pesticide va muong can su giup do kinh dao, day la nhung cho de lien lac.

Vietnameses United National Ass'n. Inc.
4403 Chestnut Street
Philadelphia P.A. 19104
Telephone 215-662-5529

Community Legal Services, Inc.
Southeast Asian Refugee Project
Law Center West
5219 Chestnut Street
Philadelphia P.A. 19139
Telephone 215-471-2200

Frieds of Farmworkers, Inc.
Legal Services for Farmworkers
3156 Kensington Ave., 7th. Fl.
Philadelphia P.A. 19134
Telephone 215-427-4885

Bureau of Pesticide Controle
New Jersey Department of
Environmental Potection
CN 411 380 Scoth Road
West Trenton, New Jersey 08628
Telephone 609-530-4146

32X

VIETNAMESE

FARMWORKERS AND PESTICIDES

If you pick fruits or vegetables you are probably regularly exposed to pesticides.

What are Pesticides?

A pesticide is any substance (whether liquid, gas, granulated or powder) which is used to kill plant diseases, insects, plants or rodents. Pesticides are poisions.

It is important to recognize that pesticides can kill or gravely injure a person. Some pesticides are more toxic or more dangerous than others.

Some pesticides are especially dangerous for pregnant women since they may cause birth defects in children born to women exposed to these pesticides.

How can pesticides enter your body?

Pesticides can be sprayed from the air by airplanes or by helicopters. Pesticides can be sprayed on the ground from tactors or by individuals with hand held applicators. Pesticide dusts or residues may also be on leaves or fruits you touch while working and can cause problems when they come in contact with your skin.

- If you swallow pesticides or eat or drink something containing pesticides, you will be effected
- Pesticides can also enter your body through your skin even if it is not cut or scratched
- Pesticides can also enter your body through the air you breathe

Direct exposure to pesticide sprays drifting onto you at the time they are applied can be particularly hazardous. Exposure to even very small amounts of some very strong pesticides is very dangerous.

What are signs of pesticide poisoning?

Direct exposure to some pesticides can cause serious illness which requires immediate medical attention. Signs of this are:

Headaches	Tiny Pupils	Abdominal Cramps
Sweating	Dizziness	Blurred Vision
Diarrcha	Vomiting	Weakness

What are other dangers from pesticides?

Long term exposure to pesticides can result in insomnia, forgetfulness, loss of eye-to hand coordination, and persistent trembling. Some pesticides may result in cancer, birth defects, and genetic defects effecting future children.

Some pesticides can cause skin rashes or burn your skin. Your skin could become red, itch and water blisters may form. Eye redness and soreness can be caused by splashing a pesticide in your eye or rubbing your eyes with a sleeve or hand that has pesticide on it.

Skin rashes and eye irritation can become serious injuries and should be treated by a doctor.

What to do if you have been poisioned by pesticides?

See a doctor or hospital immediately. Be sure to tell the doctor you have been exposed to a pesticide at work. If you can, find out what kind of pesticide was being used from the farmer or crewleader. If you don't know have the doctor contact the farmer immediately to find out.

What can You do to Prevent pesticide poisoning?

- When working in an area treated with pesticides you should be wearing protective clothing. Protective clothing should consist at least of a hat or head covering, a long sleeved shirt, long trousers or coveralls that cover the entire body, including arms, legs, shoes and socks.
- Avoid spilling sprays or liquids on skin or clothing. If spilled wash immediately with soap and water. Waiting even a few minutes could allow the pesticide to enter your body.
- Avoid inhaling pesticides.
- Wash your hands and face and change to clean clothing after returning from work and, if possible, before eating.
- Wash protective clothing used when exposed to pesticides separately from other clothing before you wear them again. Keep clothing exposed to pesticides away from children or pregnant women.
- Do not enter fields while pesticides are being applied or before you have been told it is safe to reenter a field which has been recently sprayed. You should be warned by your crew leader or the grower of areas to avoid. Never enter a place treated with pesticides until the sprays have dried or the dust has settled unless you are wearing special protective clothing.

Where can you get help or information?

If you are concerned about pesticides and want confidential help or information contact:

Vietnameses United National Ass'n. Inc.
4403 Chestnut Street
Philadelphia P.A. 19104
Telephone 215-662-5529

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Southeast Asian Refugee Project
Law Center West
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Telephone 215-427-4885

Bureau of Pesticide Controle
New Jersey Department of
Environmental Potection
CN 411 380 Scoth Road
West Trenton, New Jersey 08628
Telephone 609-530-4146

31X

CAMBODIAN

FARMWORKERS AND PESTICIDES

If you pick fruits or vegetables you are probably regularly exposed to pesticides.

What are Pesticides?

A pesticide is any substance (whether liquid, gas, granulated or powder) which is used to kill plant diseases, insects, plants or rodents. Pesticides are poisions.

It is important to recognize that pesticides can kill or gravely injure a person. Some pesticides are more toxic or more dangerous than others.

Some pesticides are especially dangerous for pregnant women since they may cause birth defects in children born to women exposed to these pesticides.

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- Do not enter fields while pesticides are being applied or before you have been told it is safe to reenter a field which has been recently sprayed. You should be warned by your crew leader or the grower of areas to avoid. Never enter a place treated with pesticides until the sprays have dried or the dust has settled unless you are wearing special protective clothing.

Where can you get help or information?

If you are concerned about pesticides and want confidential help or information contact:

MUTUAL ASSISTANCE ASSOCIATIONS

Cambodian Association Office
5412 North 5th Street
Philadelphia, Pa. 19120
Telephone: (215)324-4070,
(215)324-2633

Laotian Association Office
2320 South 7th Street
Philadelphia, Pa. 19148
Telelephone: (215)465-9777,
(215)465-5680

Southeast Asian Mutual Assistance Associations
4039 Walnut Street
Philadelphia, Pa. 19104
Telephone: (215)823-5485,
(215)823-5486

LEGAL SERVICES

Community Legal Services, Inc.
Southeast Asian Refugee Project
Law Center West
5219 Chestnut Street
Philadelphia, Pa. 19139
Telephone: (215)471-2200

Friends of Farmworkers, Inc.
Legal Services for Farmworkers
3156 Kensington Ave., 7th floor
Philadelphia, Pa. 19134
Telehpone: (215)427-4885

ENFORCEMENT AGENCY

Bureau of Pesticide Control
New Jersey Department of Environmental Protection
CN 411 380 Scotch Road
West Trenton, New Jersey 08628
Telephone (609)530-4146

This information is jointly produced by Friends of Farmworkers, Inc. and the Southeast Asian Mutual Assistance Associations.

EX 3

ការពារខ្លួនពីថ្នាំសម្លាប់សត្វល្អិត

តើថ្នាំសម្លាប់សត្វល្អិតជាអ្វី ?

ថ្នាំសម្លាប់សត្វល្អិត ជាសារធាតុគីមីមួយប្រភេទ ដែលប្រើសម្រាប់សម្លាប់ សត្វល្អិត ដង្កូវ ស្មៅ និងសត្វល្អិតតូចៗ ដែលបង្កគ្រោះថ្នាក់ដល់ដំណាំ ។

តើថ្នាំសម្លាប់សត្វល្អិតមានប៉ុន្មានប្រភេទ ?

ថ្នាំសម្លាប់សត្វល្អិតមានច្រើនប្រភេទ ដែលមានឈ្មោះ និងរូបរាងខុសៗគ្នា ។ ថ្នាំសម្លាប់សត្វល្អិតខ្លះ ត្រូវបានហាមឃាត់ មិនឲ្យលក់ និងប្រើប្រាស់ទៀតហើយ ។ ថ្នាំសម្លាប់សត្វល្អិតខ្លះទៀត ត្រូវបានកំណត់ឲ្យប្រើតែក្នុងករណីពិសេសប៉ុណ្ណោះ ។ ថ្នាំសម្លាប់សត្វល្អិតខ្លះ ត្រូវបានកំណត់ឲ្យប្រើតែដោយអ្នកដែលមានការបណ្តុះបណ្តាលពិសេសប៉ុណ្ណោះ ។

ថ្នាំសម្លាប់សត្វល្អិតខ្លះ អាចធ្វើឲ្យមនុស្សឈឺ ឬស្លាប់ភ្លាមៗ ប្រសិនបើមនុស្សប៉ះពាល់ ឬស្រូបយកថ្នាំនេះចូលទៅក្នុងខ្លួន ។ ថ្នាំសម្លាប់សត្វល្អិតខ្លះទៀត អាចធ្វើឲ្យមនុស្សឈឺ ឬស្លាប់ ក្រោយពីប៉ះពាល់ ឬស្រូបយកថ្នាំនេះចូលទៅក្នុងខ្លួនរួចមួយរយៈពេលយូរ ។ ថ្នាំសម្លាប់សត្វល្អិតខ្លះ អាចបង្កឲ្យមានជំងឺមហារីក ដែលធ្វើឲ្យមនុស្សស្លាប់ ។ ថ្នាំសម្លាប់សត្វល្អិតខ្លះទៀត អាចធ្វើឲ្យកូនដែលនៅក្នុងផ្ទៃម្តាយ មានបញ្ហាសុខភាព ឬមានភាពពិការ ។

តើអ្នកអាចប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិតតាមរយៈផ្លូវណាខ្លះ ?

អ្នកអាចប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈផ្លូវដង្ហើម ស្បែក ភ្នែក ឬតាមរយៈការលេបចូលទៅក្នុងខ្លួន ។

- ថ្នាំសម្លាប់សត្វល្អិតអាចចូលទៅក្នុងខ្លួនតាមរយៈដង្ហើម នៅពេលដែលអ្នកដកដង្ហើមចូល ក្នុងពេលដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅក្នុងខ្យល់ ។
- ថ្នាំសម្លាប់សត្វល្អិត អាចចូលទៅក្នុងខ្លួនតាមរយៈស្បែក ឬភ្នែករបស់អ្នក នៅពេលដែលអ្នកប៉ះពាល់ ឬលាងសម្អាតវត្ថុដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។
- ថ្នាំសម្លាប់សត្វល្អិតអាចចូលទៅក្នុងខ្លួនតាមរយៈការលេប ប្រសិនបើអ្នកញ៉ាំ ឬផឹកអ្វីមួយ ដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។

តើអ្នកអាចមានរោគសញ្ញាអ្វីខ្លះ ប្រសិនបើអ្នកប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត ?

ប្រសិនបើអ្នកមានការប៉ះពាល់ខ្លាំង ដោយសារថ្នាំសម្លាប់សត្វល្អិត ឬលេបថ្នាំសម្លាប់សត្វល្អិតចូលទៅក្នុងខ្លួន អ្នកអាចនឹងមានរោគសញ្ញាដូចខាងក្រោម ៖

ក្អួតចង្អោរ ក្អួតចេញ ឈឺក្បាល ឈឺពោះ ឈឺក្រពះ ឈឺសាច់ដុំ
ខ្សោយកម្លាំង ក្រហាយភ្នែក ក្អក ឆ្អល់ស្បែក ឬមានបញ្ហាផ្លូវដង្ហើម ។

ការប៉ះពាល់ខ្លាំងៗ អាចធ្វើឲ្យមនុស្សស្លាប់ភ្លាមៗ ។ ការប៉ះពាល់ខ្លាំងៗ ក៏អាចធ្វើឲ្យមនុស្សស្លាប់ ក្រោយពីប៉ះពាល់រួចមួយរយៈពេលយូរ ដោយសារជំងឺមហារីក ។ ការប៉ះពាល់ស្រាលៗ ក៏អាចធ្វើឲ្យមនុស្សឈឺ ដោយសារជំងឺមហារីក ក្រោយពីប៉ះពាល់រួចមួយរយៈពេលយូរ ដែរ ។

តើអ្នកអាចធ្វើអ្វីខ្លះ ដើម្បីការពារខ្លួនពីការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត ?

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ថ្នាំសម្លាប់សត្វល្អិត អាចចូលទៅក្នុងខ្លួនតាមរយៈស្បែក ឬភ្នែក ដូច្នេះ ការពាក់អាវវែង ស្រោមដៃ ស្បែកជើង និងមួកធំ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត នឹងជួយការពារអ្នកបាន ។

ការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈដង្ហើម ក៏ធ្វើឲ្យមនុស្សឈឺ ឬស្លាប់ដែរ ដូច្នេះ ការពាក់ម៉ាស់ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារអ្នកបានដែរ ។

- ថ្នាំសម្លាប់សត្វល្អិតអាចចូលទៅក្នុងខ្លួនតាមរយៈដង្ហើម នៅពេលដែលអ្នកដកដង្ហើមចូល ក្នុងពេលដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅក្នុងខ្យល់ ។
- ថ្នាំសម្លាប់សត្វល្អិត អាចចូលទៅក្នុងខ្លួនតាមរយៈស្បែក ឬភ្នែករបស់អ្នក នៅពេលដែលអ្នកប៉ះពាល់ ឬលាងសម្អាតវត្ថុដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។
- ថ្នាំសម្លាប់សត្វល្អិតអាចចូលទៅក្នុងខ្លួនតាមរយៈការលេប ប្រសិនបើអ្នកញ៉ាំ ឬផឹកអ្វីមួយ ដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។

ការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈដង្ហើម ក៏ធ្វើឲ្យមនុស្សឈឺ ឬស្លាប់ដែរ ដូច្នេះ ការពាក់ម៉ាស់ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារអ្នកបានដែរ ។

ការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈស្បែក ឬភ្នែក ដូច្នេះ ការពាក់អាវវែង ស្រោមដៃ ស្បែកជើង និងមួកធំ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត នឹងជួយការពារអ្នកបាន ។

ថ្នាំសម្លាប់សត្វល្អិត អាចចូលទៅក្នុងខ្លួនតាមរយៈការលេប ប្រសិនបើអ្នកញ៉ាំ ឬផឹកអ្វីមួយ ដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។ ដូច្នេះ ការមិនញ៉ាំ ឬផឹកអ្វីមួយ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារអ្នកបានដែរ ។

ការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈដង្ហើម ក៏ធ្វើឲ្យមនុស្សឈឺ ឬស្លាប់ដែរ ដូច្នេះ ការពាក់ម៉ាស់ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារអ្នកបានដែរ ។

ការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈស្បែក ឬភ្នែក ដូច្នេះ ការពាក់អាវវែង ស្រោមដៃ ស្បែកជើង និងមួកធំ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត នឹងជួយការពារអ្នកបាន ។

ថ្នាំសម្លាប់សត្វល្អិត អាចចូលទៅក្នុងខ្លួនតាមរយៈការលេប ប្រសិនបើអ្នកញ៉ាំ ឬផឹកអ្វីមួយ ដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។ ដូច្នេះ ការមិនញ៉ាំ ឬផឹកអ្វីមួយ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារអ្នកបានដែរ ។

តើអ្នកអាចធ្វើអ្វីខ្លះ ដើម្បីការពារកូនដែលនៅក្នុងផ្ទៃម្តាយ ពីការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត ?

ថ្នាំសម្លាប់សត្វល្អិត អាចធ្វើឲ្យកូនដែលនៅក្នុងផ្ទៃម្តាយ មានបញ្ហាសុខភាព ឬមានភាពពិការ ។ ដូច្នេះ ការមិនឲ្យស្ត្រីមានផ្ទៃពោះ ធ្វើការជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារកូនដែលនៅក្នុងផ្ទៃម្តាយ ពីការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិតដែរ ។

ថ្នាំសម្លាប់សត្វល្អិត អាចចូលទៅក្នុងខ្លួនតាមរយៈស្បែក ឬភ្នែក ដូច្នេះ ការពាក់អាវវែង ស្រោមដៃ ស្បែកជើង និងមួកធំ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត នឹងជួយការពារអ្នកបាន ។

ការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈដង្ហើម ក៏ធ្វើឲ្យមនុស្សឈឺ ឬស្លាប់ដែរ ដូច្នេះ ការពាក់ម៉ាស់ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារអ្នកបានដែរ ។

ថ្នាំសម្លាប់សត្វល្អិត អាចចូលទៅក្នុងខ្លួនតាមរយៈការលេប ប្រសិនបើអ្នកញ៉ាំ ឬផឹកអ្វីមួយ ដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។ ដូច្នេះ ការមិនញ៉ាំ ឬផឹកអ្វីមួយ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារអ្នកបានដែរ ។

តើអ្នកអាចធ្វើអ្វីខ្លះ ដើម្បីការពារកូនដែលនៅក្នុងផ្ទៃម្តាយ ពីការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត ?

ថ្នាំសម្លាប់សត្វល្អិត អាចធ្វើឲ្យកូនដែលនៅក្នុងផ្ទៃម្តាយ មានបញ្ហាសុខភាព ឬមានភាពពិការ ។ ដូច្នេះ ការមិនឲ្យស្ត្រីមានផ្ទៃពោះ ធ្វើការជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារកូនដែលនៅក្នុងផ្ទៃម្តាយ ពីការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិតដែរ ។

- ថ្នាំសម្លាប់សត្វល្អិតអាចចូលទៅក្នុងខ្លួនតាមរយៈដង្ហើម នៅពេលដែលអ្នកដកដង្ហើមចូល ក្នុងពេលដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅក្នុងខ្យល់ ។
- ថ្នាំសម្លាប់សត្វល្អិត អាចចូលទៅក្នុងខ្លួនតាមរយៈស្បែក ឬភ្នែករបស់អ្នក នៅពេលដែលអ្នកប៉ះពាល់ ឬលាងសម្អាតវត្ថុដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។
- ថ្នាំសម្លាប់សត្វល្អិតអាចចូលទៅក្នុងខ្លួនតាមរយៈការលេប ប្រសិនបើអ្នកញ៉ាំ ឬផឹកអ្វីមួយ ដែលមានថ្នាំសម្លាប់សត្វល្អិតនៅលើវា ។

ការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈដង្ហើម ក៏ធ្វើឲ្យមនុស្សឈឺ ឬស្លាប់ដែរ ដូច្នេះ ការពាក់ម៉ាស់ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត ក៏ជួយការពារអ្នកបានដែរ ។

ការប៉ះពាល់ថ្នាំសម្លាប់សត្វល្អិត តាមរយៈស្បែក ឬភ្នែក ដូច្នេះ ការពាក់អាវវែង ស្រោមដៃ ស្បែកជើង និងមួកធំ ក្នុងពេលដែលអ្នកកំពុងធ្វើការ ជាមួយនឹងដំណាំ ដែលមានថ្នាំសម្លាប់សត្វល្អិត នឹងជួយការពារអ្នកបាន

35-X

PESTICIDE TREATED AREA

CUSTOMER:PLEASE REMOVE AFTER 24 HRS.

LEA Y GUARDE LOS INFORMES DE COSECHA / READ AND SAVE THIS CROP SHEET

ALGODON
COTTON

✓ **ESTOS SON LOS PESTICIDAS USADOS CON MAS FRECUENCIA EN ESTA COSECHA. UNO O MAS DE LOS SIGUIENTES SINTOMAS PUEDEN INDICAR QUE HA SIDO ENVENENADO CON UN PESTICIDA.** / These are the most commonly used pesticides for this crop. One or several of the following symptoms may indicate a pesticide poisoning.

QUIMICA / CHEMICAL	MESES DE USO / MONTHS APPLIED (E/J F M A M J J A S O N D)	NO ENTRE A UN CAMPO ROCIADO / DO NOT ENTER SPRAYED FIELDS	CLASE / CLASS
✓ Chlordimeform Fundal, Galecron*		✓ POR 24 HORAS For 24 hours	Formamidine
✓ Dicrotophos Bidrin*		✓ POR 48 HORAS For 48 hours	Organophosphate
✓ Permethrin Ambush, Pounce*		✓ POR 24 HORAS For 24 hours	Synthetic Pyrethroid
✓ Mepiquat Chloride PIX*		✓ POR 24 HORAS For 24 hours	Piperidine Derivative
✓ ESFenvalerate Asana*		✓ POR 24 HORAS For 24 hours	Synthetic Pyrethroid
✓ Fenvalerate Pydrin*		✓ POR 24 HORAS For 24 hours	Synthetic Pyrethroid
✓ Trifluralin Treflan*		✓ POR 24 HORAS For 24 hours	Dinitroaniline
✓ Ethyl Parathion Parathion*		✓ POR 7 DIAS For 7 days	Organophosphate

EFECTOS A LA SALUD Y PRECAUCIONES / HEALTH EFFECTS AND PRECAUTIONS

✓ **EFECTOS A LARGO PLAZO** / Long Term Effects:
SE SOSPECHA QUE ALGUNOS PESTICIDAS CAUSAN DEFECTOS NATALES, ABORTO ESPONTANEO, ESTERILIDAD EN EL HOMBRE Y LA MUJER, IRRITACIONES A LA PIEL, DANOS AL HIGADO U OTROS ORGANOS. TAMBIEN SE SOSPECHA QUE ALGUNOS PESTICIDAS PUEDEN CAUSAR, A LARGO PLAZO, TUMORES O CANCER. / Some pesticides are suspected of causing birth defects, reproductive effects, skin problems, and injury to liver or other organs. Some pesticides are also suspected of causing tumors or cancer over a long period of time.

✓ **PRECAUCIONES EN GENERAL** / General Precautions:
LOS PESTICIDAS SE DEBEN DE USAR Y GUARDAR DE ACUERDO CON LAS INSTRUCCIONES QUE APARECEN EN LA ETIQUETA. CUIDE SU SALUD Y LA DE SU FAMILIA SIGUIENDO LAS RECOMENDACIONES QUE SE DAN EN ESTE INFORME. / Pesticides must be handled, stored, and used according to label directions. Follow the safety precautions on this sheet to protect yourself and your children.

✓ = **DEMASIADO PELIGROSO. MENOS DE UNA CUCHARITA LO PUEDE MATAR.** EXTREMELY DANGEROUS. Less than one teaspoon may kill you.

OTROS PESTICIDAS USADOS SON / Other pesticides used are: Pendimethalin, Cypermethrin, Methyl Parathion, Sodium Chlorate, Dimethoate, Arsenic Acid, Carbaryl, Fluazifop-butyl, Dipropetryn, Endothall, DEF, MSMA, Maneb, Paraquat, Oxydemeton-methyl, Ethephon, Monocrotophos, Metolachlor, Acephate, Sulprofos, Triadimefon.

* **PRODUCTOS DE USO GENERAL**
* Commonly used product

LA LEY REQUIERE QUE EL PATRON ✓ LEA LA INFORMACION ✓ A SUS TRABAJADORES. LEA SOLAMENTE LAS QUIMICAS Y PERIODO DE ENTRADA PARA ESAS QUIMICAS QUE USTED USA. / The law requires that employers read the information ✓ to workers. Read only chemicals and reentry intervals for the chemicals you use.

INFORME DE COSECHA PAGINA 2
CROP SHEET PAGE 2
(1985)

NOMBRE DEL PATRON / Name of Employer
DIRECCION / Address
TELEFONO / Phone Number

Distributed by:
TEXAS DEPARTMENT OF AGRICULTURE
Jim Hightower, Commissioner
P.O. Box 12847, Austin, Texas 78711
1-800-832-7347

✓ AVISOS DE SALUBRIDAD / SAFETY TIPS:

PARA QUE LOS PESTICIDAS NO LE PENETREN AL CUERPO SE RECOMIENDA QUE SE LAVE LAS MANOS BIEN ANTES DE COMER, BEBER, FUMAR, MASTICAR CHICLE O TABACO, O IR AL BAÑO.

Washing before eating, drinking, smoking using gum or tobacco, or going to the bathroom is a good way to keep pesticides from getting into your mouth or going through your skin.

✓ NO USE BOTES DE PESTICIDAS EN EL HOGAR / DO NOT USE PESTICIDE CONTAINERS FOR HOME USE

SI USTED ESTA EMBARAZADA, CONSULTE CON SU MEDICO SOBRE LOS PELIGROS DE ESTAR EXPUESTA A PESTICIDAS DURANTE SU EMBARAZO. MANTENGA A LOS NIÑOS FUERA DE LAS LABORES Y LEJOS DE LOS PESTICIDAS.

If you are pregnant, ask your doctor about the risk from pesticide poisoning. Keep children out of the fields and away from pesticides.

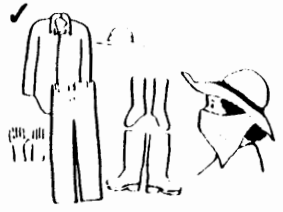
ES POSIBLE QUE ENSUCIE LA ROPA DE TRABAJO CON LOS PESTICIDAS. LAVE LA ROPA ANTES DE PONERSELA OTRA VEZ Y CUANDO LA LAVE SEPARALA DE LA OTRA ROPA.

Pesticides can remain on your work clothes. Wash your work clothes before wearing them again and wash in a different load from other laundry.

LA LEY PROHIBE QUE USTED SE EXPONGA AL ROCIO DEL PESTICIDA DIRECTAMENTE, O INDIRECTAMENTE A CAUSA DEL VIENTO. SI LE CAE PESTICIDA, LAVESE EN SEGUIDA CON CUALQUIER AGUA LIMPIA CERCANA. TAN PRONTO SEA POSIBLE, BAÑESE, LAVESE EL PELO Y PONGASE ROPA LIMPIA.

It is prohibited by law for you to be sprayed, directly or through drift. If you are sprayed, wash immediately in the nearest clean water. Shower, shampoo, and change into clean clothes as soon as possible.

AVISOS DE SALUBRIDAD / SAFETY TIPS: ✓



PROTEJASE DE LOS PESTICIDAS USANDO CAMISA DE MANGA LARGA, PANTALONES LARGOS, ZAPATOS, CALCETINES, Y UN SOMBRERO O UNA PAÑUELETA. SE RECOMIENDAN GUANTES.

Protect yourself from getting pesticides on your skin by wearing a long sleeved shirt, long legged pants, shoes and socks, and a hat or scarf. Gloves are recommended.

✓ SI USTED CREE QUE TIENE ALGUN SINTOMA DE ENVENENAMIENTO CON PESTICIDAS:

- Inmediatamente lávese con jabón y agua,
- Vaya al doctor, hospital o clínica de migrantes más cercano,
- Vaya con un familiar o un amigo (NO MANEJE USTED MISMO),
- Llevese este Informe de Cosecha (Crop Sheet) para que lo vea el doctor,
- Digale al doctor que usted cree que ha sido expuesto a pesticidas. Su doctor puede llamarle a su patron para pedirle más información acerca de los pesticidas que se usaron,
- Para conseguir información de emergencia acerca de los pesticidas su doctor debe de llamar a un Centro de Control de Venenos (Poison Control Center) al 1-800-441-0040 o al 409-765-1420 o al 1-800-392-8548 o la Cadena Nacional de Telecomunicaciones sobre Pesticidas (The National Pesticides Telecommunications Network) al 1-800-858-7378

✓ IF YOU THINK YOU HAVE A PESTICIDE POISONING SYMPTOM:

- Immediately wash with soap and water,
- Go to the nearest doctor, hospital, or migrant health clinic,
- Have a family member or friend go with you (DO NOT DRIVE YOURSELF),
- Take this Crop Sheet with you for the doctor,
- Tell the doctor you think you were exposed to pesticides. Your doctor can call your employer for more information about what pesticides were used.
- Have your doctor call to get emergency information about the pesticides from a Poison Control Center at 1-800-441-0040 or 409-765-1420 or 1-800-392-8548 or The National Pesticide Telecommunications Network at 1-800-858-7378

COMO CAMPESINO USTED TIENE EL DERECHO DE:

- Pedir los nombres de las químicas que se usaron en la labor,
- Recibir de cada patrón los Informes de Cosecha para cada cosecha en la que usted trabaja,
- pedir al patrón su lista de productos químicas e informes de estos productos,
- Presentar su queja al Departamento de Agricultura de Texas si sus derechos han sido violados. LLAME GRATIS AL 1-800-832-7347, y
- Asistir a los programas de entrenamiento presentados por el Departamento de Agricultura de Texas o por el Servicio de Extension Agrícola de Texas, (según donde usted [illegible] Consultenos con su oficina local o llame 1-800-832-7347

AS A FARMWORKER, YOU HAVE THE RIGHT TO:

- Request the names of the chemicals that have been applied to a field,
- Receive Crop Sheets each season from each employer,
- Receive the Workplace Chemical List and Material Safety Data Sheets from your employer(s) when you ask,
- File a complaint with the Texas Department of Agriculture if your rights are violated. CALL 1-800-832-7347, and
- Attend training programs provided by the Texas Department of Agriculture or Texas Agricultural Extension Service, (depending on where you work). Contact your local office or call 1-800-832-7347.

To be entitled to this notification the beekeeper must be registered with the Bureau of Pesticide Control by March 1 of each year. The grower may obtain this registered list from the Bureau.

FARM WORKERS

A reentry time is the period of time that must elapse after a field is treated with a pesticide before farm workers can enter to perform work requiring substantial contact with the treated plants.

No farm worker may enter any treated field until the pesticide spray is dry or pesticide dust is settled.

All EPA toxicity category one pesticides ("Danger" signal word) have a minimum 24 hour reentry time.

A 48-hour reentry time applies after each application of a pesticide containing one of the following ingredients:

Bidrin
carbonphenothion (Trithion)
demeton (Systox)
disulfoton (Di-Syston)
endosulfan (Thiodan)
Endrin
ethion
Metasystox-R
methidathion (Supracide)
methyl parathion
mevinphos (Phosdrin)
parathion
phorate (Thimet)
phosphamidon
TEPP

If more than one pound of parathion active ingredient is applied per acre, there is a 14 day reentry time.

Any label reentry time which is longer than the above must be followed.

Farm workers must be told not to enter treated fields for which the reentry time has not expired. If the workers do not understand English, the warning must be in their language.

For pesticides with a longer than 7 day reentry time, warning signs must be posted (example attached). The signs are to be located at field access points and, for fields adjacent to public roads, at each corner and at intervals of 600 feet or less.

These signs can be posted no more than 24 hours prior to application and must be removed within 5 days after the reentry time is over (before workers enter).

Bulletin board notice for reentry times of 24 hours or more is required for farm workers. This bulletin board notice must be at the point where the workers assemble for instructions and must be visible to them. Notice requirements tie in with the pesticide application record keeping system (see example attached).

A commercial pesticide applicator business applying a pesticide with a 24 hour or more reentry time to a growers field must tell the grower what the reentry time is.

The grower (owner or lessee) is responsible for following the farm worker reentry regulations.

Any private applicator who applies or supervises the application of the pesticide within the reentry time is jointly responsible with the owner or lessee.

The reentry warning signs required to comply with this section are being printed and will be available from the Bureau of Pesticide Control (examples for duplication).

ENFORCEMENT ACTIONS

Employees of the New Jersey Department of Environmental Protection, Bureau of Pesticide Control have the authority to enter and inspect at reasonable hours to determine compliance with New Jersey regulations on pesticides. Persons present at the inspection location must be notified of the intention to enter and inspect. A routine farm inspection program was initiated in 1985 and is continuing. Refusal to allow such inspection after notice is a violation under N.J.A.C. 7:30-1.7.

A stop sale, stop use, removal or embargo order may be issued for pesticide products held by the private applicator which are violative under the Pesticide Control Act or pesticide regulations. The private applicator must abide by this order until adequate provision is made for compliance. An example would be a stop use order issued until missing or illegible label(s) on a pesticide container were replaced.

The New Jersey Pesticide Control Act provides for fines up to $3000 for each violation. Many initial violations of the pesticide regulations result in the issuance of an Administrative Order (warning notice) to the violator. Repeat violations of the same regulation will result in the issuance of a fine. The amount of the fine is based on a penalty guideline used by the Department of Environmental Protection, Bureau of Enforcement Services.

Registered private operators held responsible for a pesticide misapplication may be required to become registered private applicators (take exams) in order to demonstrate competency to continue to apply pesticides.

Registered private applicators held responsible for a pesticide misapplication may be required to repeat the private applicator certification testing in order to keep their license.

Registration for private pesticide operators and applicators may be denied, suspended or revoked for violative acts as specified in the pesticide regulations.

To be entitled to this notification the beekeeper must be registered with the Bureau of Pesticide Control by March 1 of each year. The grower may obtain this registered list from the Bureau.

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mevinphos (Phosdrin)
parathion
phorate (Thimet)
phosphamidon
TEPP

If more than one pound of parathion active ingredient is applied per acre, there is a 14 day reentry time.

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A commercial pesticide applicator business applying a pesticide with a 24 hour or more reentry time to a growers field must tell the grower what the reentry time is.

EXAMPLES FOR BULLETIN BOARD NOTICE FOR REENTRY

There are several ways for the grower to clearly identify fields with the appropriate reentry times. The following examples are presented to you as options that will meet the requirements for reentry notice for pesticides with a 24 hour or longer reentry.

OPTION ONE

CODED CALENDAR

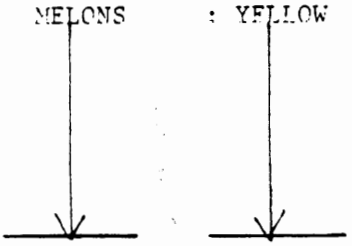
Growers may choose to post a calendar, no smaller than 8½ by 11, and list or color code those crops that have been treated and indicate the days when workers may not enter the field. An easy method would be to color code crops or fields using markers, tapes, etc. and place these colors on the days workers must stay out of the field. An example is given below.

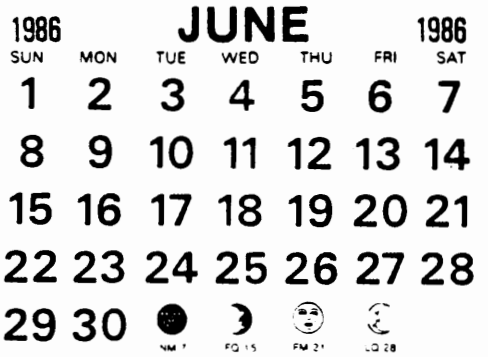
KEEP OUT - MANTENGASE FUERA

SWEET CORN : BLUE

TOMATOES : RED

MELONS : YELLOW





For outside posting, simply cover both with plastic laminate, plexiglas. Removable colored tape preferred for multi-application situations that would clutter the calendar and make it hard to understand.

OPTION TWO

Another option would be a map of the farm fields. Growers could write on the map directly and update each time an application is made, or use the map as a key and place a card or sign next to it designating the field that was treated.

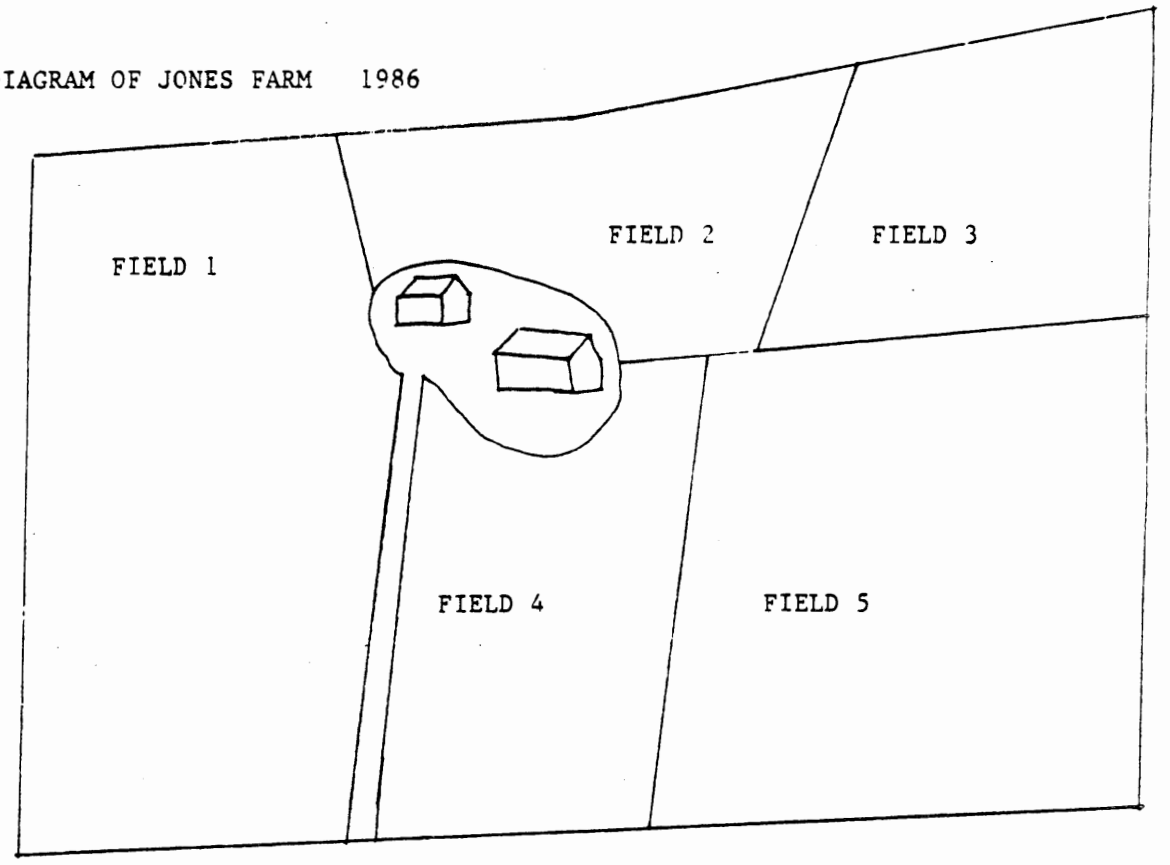
The card should contain the following information:

KEEP OUT OF THIS AREA — MANTENGASE FUERA DEL AREA

FIELD (OR CROP) - CAMPO (O COSECHA)

REENTRY DATE - DIA DE ENTRADA

DIAGRAM OF JONES FARM 1986



OPTION THREE

Grower can make a chart and record the information in chart form. An example of a chart is listed below. This chart should correspond to the field designations in your application records.

FIELD/CROP CAMPO/COSECHA	REENTRY DATE DIA DE ENTRADA

DANGER-PELIGRO
Pesticides-Pesticidas

Name – Nombre

Reentry Date – Dia de Entrada

Application Date – Dia de Tratamiento

Graphics N.J.D.E.P. (B.I.S.)

N.J. Department of Environmental Protection • Division of Environmental Quality • Bureau of Pesticide Control

4 3X

PESTICIDES IN AGRICULTURE

LEARN YOUR RIGHTS AND PROTECT YOUR HEALTH

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY, PESTICIDE CONTROL PROGRAM

44X

Let's protect our earth

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
PESTICIDE CONTROL ELEMENT
380 SCOTCH ROAD CN 411
TRENTON, N.J. 08625

Prepared by
Nancy Santiago

Acknowledgements
Donald Patterson
John Orrok
Olga Rodriquez

45X

HELLO FARMWORKERS
THE PESTICIDE PROGRAM WILL HELP YOU AND YOUR FAMILY

The Pesticide Control Program has a section which investigates misuse of pesticides on the farms of New Jersey. The pesticides are chemical products that are used to eliminate insects and weeds which destroy the crops.

MISUSE OF PESTICIDE MEANS:

You don't have protective equipment available when you mix pesticides.

After spraying the field with pesticides, you will be sent to work immediately in the sprayed area.

The time a field is sprayed, pesticide drifts onto you.

When the field is sprayed, if drifts onto your sleeping quarters.

TIPS OF INFORMATION

Remember, do not enter the field until the sprayed pesticide is dry or the dust is settled.

Talk with the owner of the farm and tell him if you are having problems with pesticides.

If somebody drifts pesticides onto you, keep one of the pieces of clothing you wore that day for the laboratory to examine.

Call immediately (609) 530-4146 and report the complaint related to pesticides.

THERE ARE ENVIRONMENTAL LAWS THAT PROTECT YOU

If you have problems with pesticides, please call immediately (609) 530-4146 or (609) 530-4141.

If you cannot call the Pesticide Control Program because you are working, look for a friend that can call for you immediately. It is very important to call as soon as possible. The information that you need to file a complaint is the following:

...farm where the problem with pesticides occured.

...address of the farm.

...date of the problem.

...brief description of the problem.

LEARN THE PESTICIDE LAWS

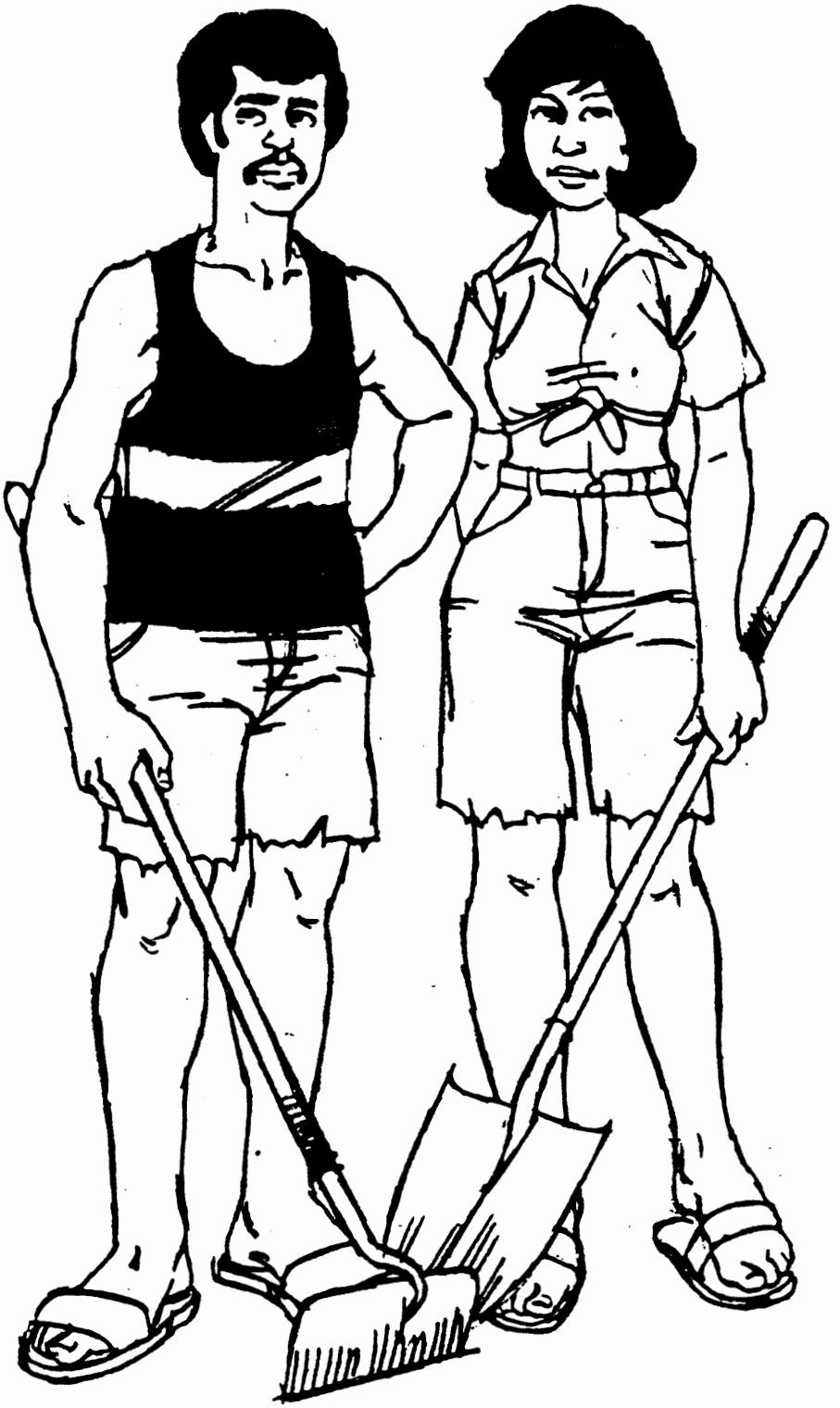
If you spray pesticides when the owner of the farm is not present, you need a license from the Pesticide Control Program.

The license should say that you are a pesticide operator and that you have training from the person in charge of the farm.

If you supervise other farmworkers that spray pesticides, then you need a license that indicates that you are a registered pesticide applicator.

You must apply the pesticides according to label directions and New Jersey Pesticide Regulations, NJAC 7:30 (1 thru 10).

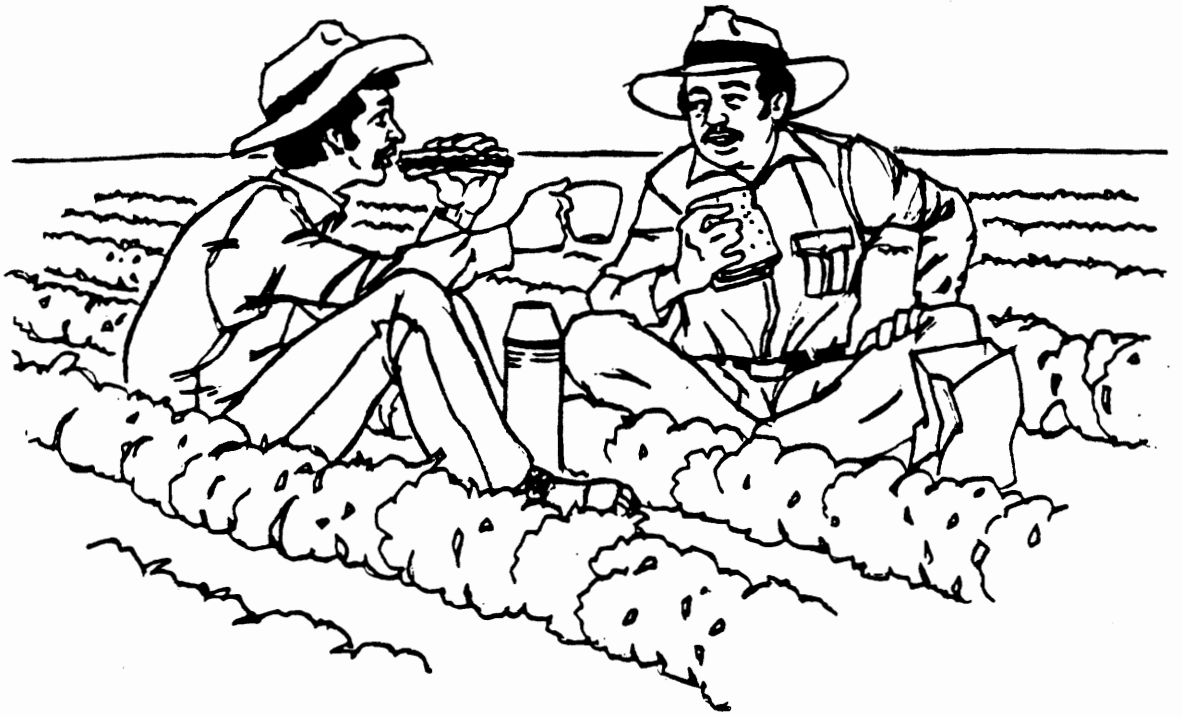
DO NOT WEAR THIS TYPE OF CLOTHING WHEN YOU ARE WORKING ON THE FARM.



Use protective clothes to avoid rashes and any problem with your body.

FARMWORKERS, PROTECT YOURSELF FROM PESTICIDES AND YOU WILL PROTECT YOUR HEALTH.

EAT AWAY FROM THE FIELD



BEFORE YOU EAT, KEEP OUT OF THE AREAS WHICH ARE TREATED WITH PESTICIDES

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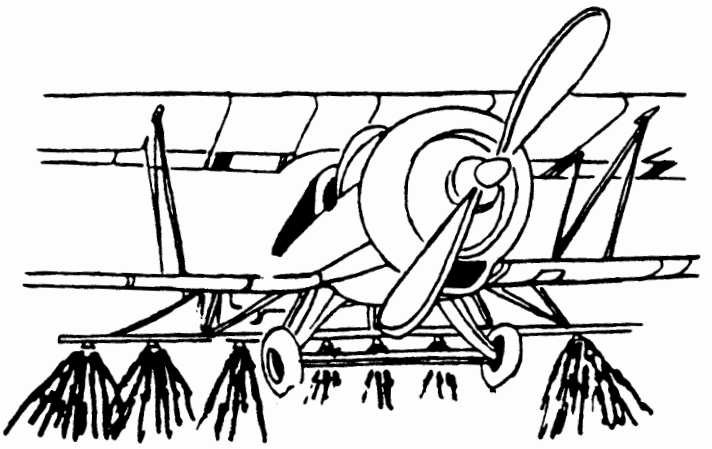
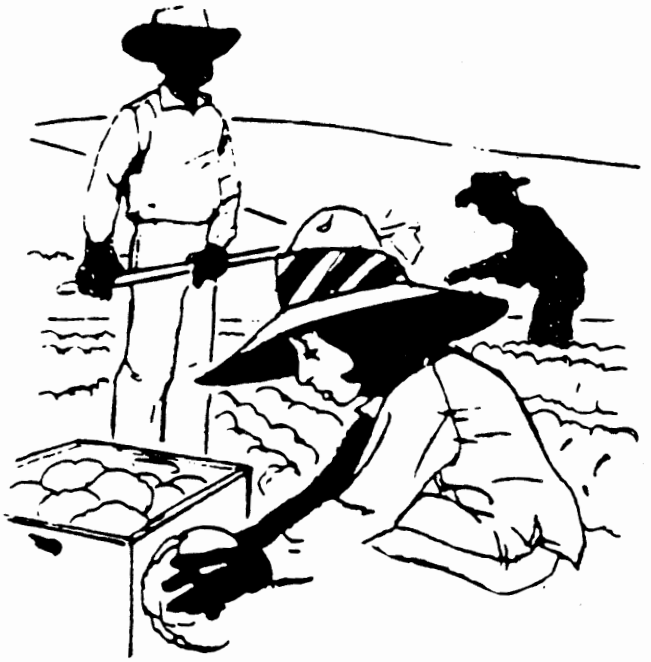
PROBLEMS WITH PESTICIDES

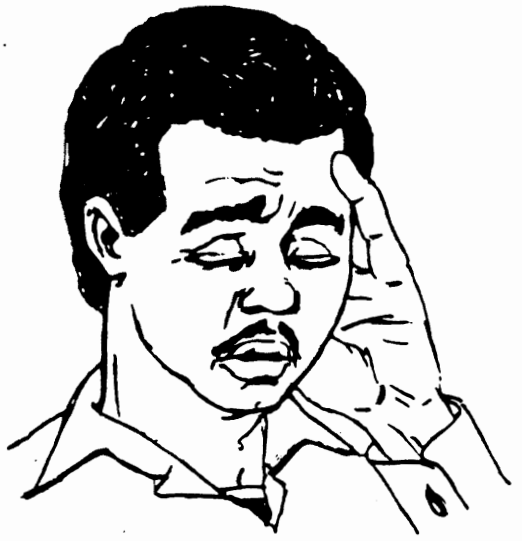




If you are exposed to pesticides
you should wash immediately!

IF YOU HAVE PROBLEMS WITH PESTICIDES IN THE AREA IN WHICH YOU WORK, PLEASE CALL (609) 530-4146 or (609) 530-4141.

Check to see if you have rashes on your body while you are working in the field.



Do you have a headache or stomachache after you have worked in an area recently sprayed with a pesticide?

IF YOU HAVE SIMILAR PROBLEMS CALL AND FILE A COMPLAINT
(609) 530-4146 or (609) 530-4141.

LAWS REGARDING PESTICIDES

Before you start to work on the farm, be aware of the type of pesticide that is used.

Some pesticides are highly toxic and could cause harm if care is not taken to avoid unnecessary exposure.

If the pesticide is highly toxic you should wait 24 to 48 hours or more before entering the treated field.

To protect yourself, you should wait at least 24 hours before entering fields treated with a pesticide having the "Danger" signal word.

On the farm there should be available a bulletin board about pesticides which have a reentry period of 24 hours or more.

The bulletin board should be in the area in which farm-workers assemble.

The pesticides are divided into three groups:

1. "Danger" - Peligro, or "Poison" - Veneno
2. "Warning" - Advertencia
3. "Caution" - Precaucion

If you use pesticides, read the label and be careful. If you have doubts or you do not understand the label, ask the person in charge of the farm.

On the farm there should be a posted sign available that explains the pesticides that are being used.

This sign is only used for those pesticides that have a 7 day reentry period.

The sign must be in English or Spanish or in the language that farmworkers speak, and should indicate:

1. "Danger" and Name of Pesticide
2. Application Date
3. Reentry Date

WITH THE INFORMATION YOU HAVE LEARNED IN THIS BOOKLET YOU SHOULD BE ABLE TO LEAVE THE FIELDS EACH DAY IN GOOD HEALTH.

Cut here and keep in your wallet

Problem with pesticide, please call:
(Spanish & English)
8:00 a.m.-5:00 p.m. ...(609) 530-4146 (Nancy Santiago)
(609) 530-4141 (Magda Rodriquez)

After 5:00 p.m. (English Only)..(609) 292-7172 (Hot Line)

THE PESTICIDE CONTROL PROGRAM STATE OF NEW JERSEY

The regulations addressing farmworkers are published in the section 7:30-9.13 and they were approved on January 3, 1986.

This is only a bulletin about pesticides, if you want more information about the regulations of New Jersey, please call (609) 530-4146 New Jersey Pesticide Control Program.

Remember, if you have problems or questions about any type of pesticide's misuse or want general information, please call Nancy Santiago at (609) 530-4146.

The DEP hotline number is (609) 272-7172 and it works 24 hours.

Drawings used with the permission of
National Agricultural Chemical Association
(NACA).

PESTICIDAS EN LA AGRICULTURA

CONOZCA SUS DERECHOS Y PROTEJA SU SALUD

DEPARTAMENTO DE PROTECCION AMBIENTAL DE NUEVA JERSEY
DIVISION DE CALIDAD AMBIENTAL, PROGRAMA DE CONTROL DE PESTICIDAS

56 X

Vamos a protejer nuestra tierra

DEPARTAMENTO DE PROTECCION AMBIENTAL DE NUEVA JERSEY
DIVISION DE CALIDAD AMBIENTAL
OFICINA DE CONTROL DE PESTICIDAS
CALLE SCOTCH 380
TRENTON, NJ 08625

Preparado por
Nancy Santiago

Reconocimientos para
Donald Patterson
John Orrok
Olga Rodríquez

57X

HOLA TRABAJADOR AGRICOLA
EL PROGRAMA DE PESTICIDA LO AYUDARA A USTED Y A SU FAMILIA

El Programa de Control de Pesticidas tiene una sección que investiga el mal uso de los pesticidas en las fincas de New Jersey. Los pesticidas son productos químicos que se usan para eliminar insectos y hierbas que dañan la cosecha.

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MAL USO DE PESTICIDAS QUIERE DECIR:

. . . **Que no haya equipo protectivo** disponible cuando mezcle los pesticidas.

. . . Que después de haber tratado* el campo lo envien inmediatamenta a **trabajar al área tratada.**

. . . Que al mismo tiempo que apliquen pesticidas en el campo **lo mojen o lo roceen.**

. . . Que cuando apliquen pesticidas en el campo, también **roceen el campamento donde usted duerme.**

OREJITAS DEL SABER

Recuerde que **no debe entrar** al campo hasta que el pesticida tratado esté seco y si es en polvo hasta que este asentado.

Hable con el dueño de la finca y digale si está sufriendo por problemas con pesticidas.

Si le riegan pesticida, **guarde la rope** que usó ese día para que el laboratorio la examine.

Llame inmediatamente al 609-530-4146 y reporte su queja con relación a los pesticidas.

*Tratamiento=aplicación de venenos, ó pesticidas en el campo.

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EXISTEN LEYES AMBIENTALES QUE LO PROTEJEN A USTED

Si tiene problemas con pesticidas favor de reportarlo inmediatamente al (609) 530-4146 ó (609) 530-4141.

Si usted no puede llamar al programa de Control Pesticidas porque esta trabajando, busque un amigo que llame por usted. La información se investiga en forma confidencial. La información que necesita la oficina es la siguiente.

. . .finca donde ocurrió el problema con pesticidas

. . .dirección de la finca

. . .dia del problema

. . .breve descripción del problema

CONOZCA SUS DERECHOS

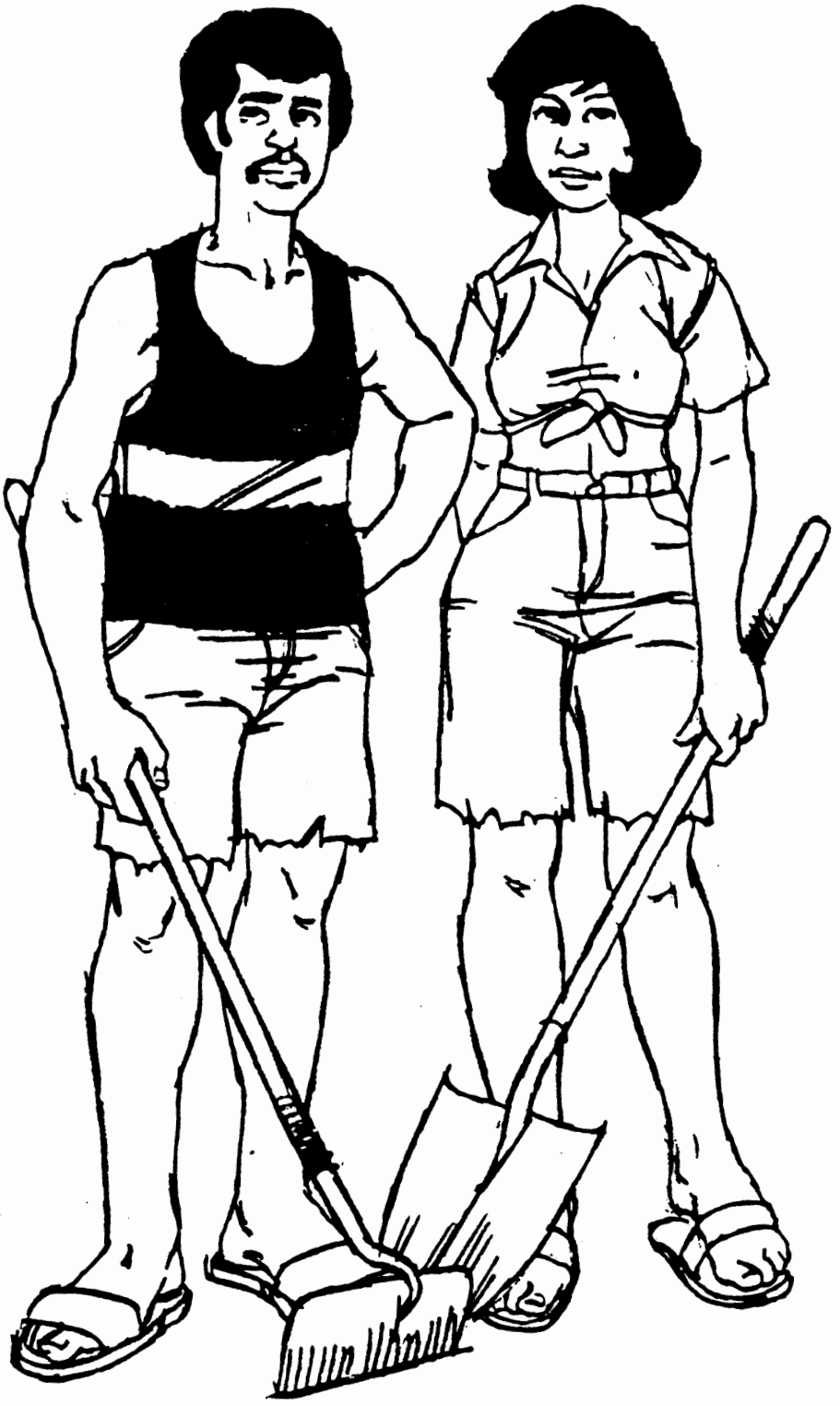
Si usted riega pesticida cuando el dueño de la finca no esta presente, usted necesita un permiso del Programa de Control de Pesticidas.

El permiso debe indicar que usted es Operador de Pesticidas y que recibió entrenamiento con el encargado de la finca.

Si usted como trabajador agrícola superviza a otros trabajadores agrícolas que riegan pesticida, usted necesita una licencia que indique que es Aplicador de Pesticidas.

60X

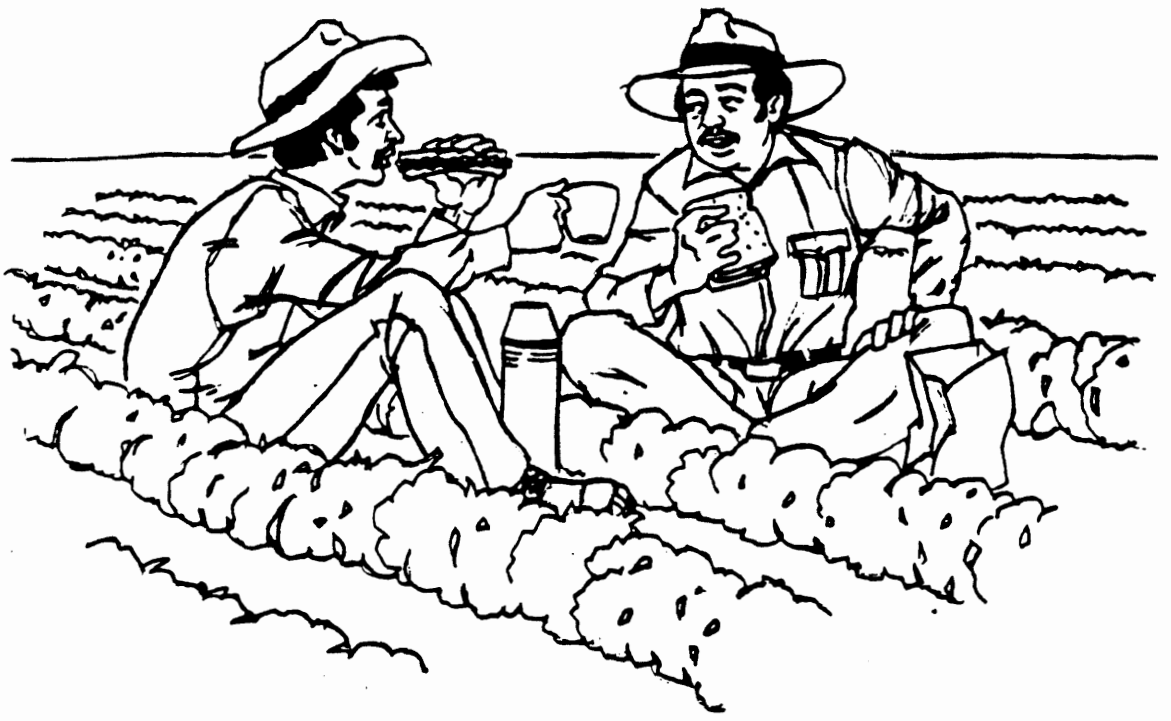
NO VISTA ASI CUANDO TRABAJE EN LA FINCA.



Use ropa protectiva para evitar ronchas o cualquier problema en la piel.

TRABAJADOR AGRICOLA PROTEJASE DE LOS PESTICIDAS Y CUIDARA DE SU SALUD.

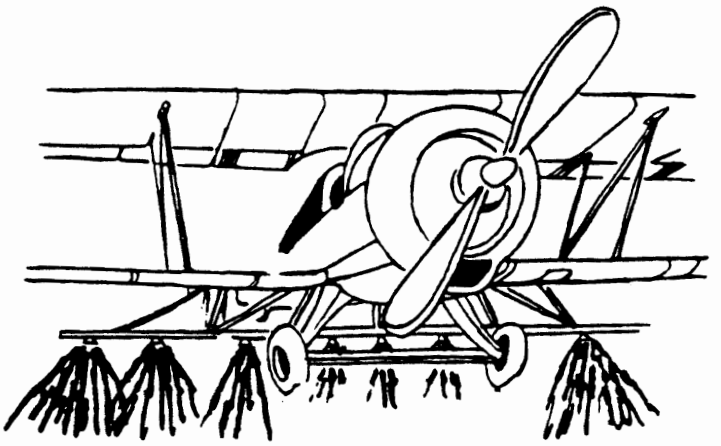
COMA LEJOS DEL CAMPO



ANTES DE COMER, ALEJESE DE LAS ZONAS QUE ESTEN TRATADAS CON PESTICIDAS.

62X

PROBLEMAS CON PESTICIDAS

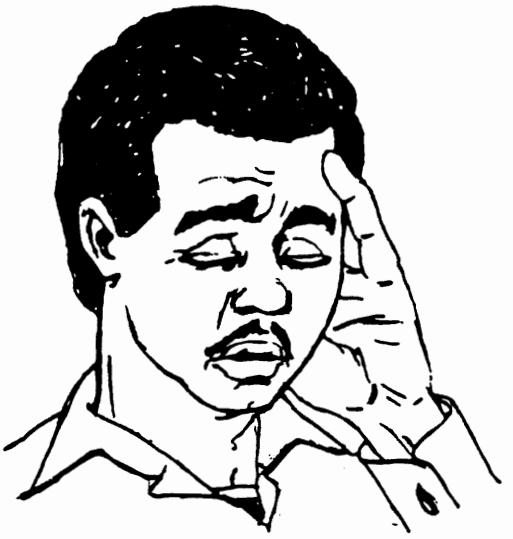


Si usted ha sido rociado con pesticidas debe lavarse el cuerpo inmediatamente.

SI TIENE PROBLEMAS CON PESTICIDAS EN EL AREA QUE USTED TRABAJA, LLAME AL (609) 530-4146 ó (609) 530-4141.

PROBLEMAS CON PESTICIDAS

Vea si le salen ronchas, en la piel mientras trabaja en el campo. Observe si esas ronchas son relacionadas con el mal uso de pesticidas.



Observe si tiene dolor de cabeza, ó dolor de estómago después de haber trabajado en un área recientemente tratada.

SI TIENE PROBLEMAS SIMILARES A ESTOS LLAME Y HAGA SU QUEJA AL (609) 530-4146 o (609) 530-4141.

DATOS SOBRE LOS PESTICIDAS

Antes de empezar a trabajar asegúrese de conocer que tipo de pesticidas se usa en la finca.

Algunos pesticidas son altamenta tóxicos y causan dãno a la salud si se usan incorrectamente.

Si el pesticida es altamente tóxico debe esperar, de 24 a 48 horas antes de regresar al área fumigada.

Los pesticidas del grupo "Danger," "Peligro" hay que esperar un mínimo de 24 horas para regresar al área tratada.

En la finca debe haber disponible un "bulletin board" ó tablón de información sobre los pesticidas que tengan un tiempo de espera de 24 horas o más.

El tablón de información debe estar en el area en la cual usted se reune con otros trabajadores.

Los pesticidas se dividen en tres grupos dependiendo del peligro de contaminación.

1. "Danger" - Peligro ó "Poison" - Veneno
2. "Warning" - Advertencia
3. "Caution" - Precaución

Si usa pesticidas lea la etiqueta y tenga mucho cuidado. Si tiene duda o no entiende la etiqueta pregunte al encargado de la finca.

En la finca debe haber un letrero disponible que explique los pesticidas que se han usado.

En letrero es usado solamente para los pesticidas que haya que esperar más de siete (7) dias para regresar al área tratada.

El letrero debe indicar:

"Reentry Date" - Día de regreso al area que ha sido tratada, después del tiempo de espera.

"Name of Pesticide" - Nombre del pesticida usado en el área.

"Application Date" - Día de tratamiento con pesticidas.

CON LA INFORMATION QUE USTED HA APRENDIDO EN ESTE PAMFLETO, USTED DEBE SENTIRSE QUE PUEDE DEJAR EL CAMPO TODOS LOS DIAS CON BUENA SALUD.

Recorte aquí y guardélo en la cartera

Problemas con pesticidas llame de:
(español y inglés)
8:00 a.m. - 5:00 p.m. (609) 530-4146 (Nancy Santiago)
(609) 530-4141 (Magda Rodriquez)

5:00 p.m. en adelante. . . (609) 292-7172 Hot Line
(inglés solamente)

66x

LA OFICINA DE CONTROL DE PESTICIDAS DE NJ INFORMA. . .

Que revisado sus reglas para el uso de los pesticidas. Estas regulaciones aparecen publicadas en el registro de New Jersey y fueron aprovadas en Jan. 3, 1986, Sec. 7:30-9.10.

Este bolentin es solamente una guía sobre los pesticidas. Si desea más información sobre las regulaciones de NJ, favor de llamar (609) 530-4146 oficina de Control de Pesticidas en NJ.

Recuerde, si tiene problemas ó preguntas debido al mal uso de pesticidas llame a Nancy Santiago al (609) 530-4146 de 8:00 a.m. - 5:00 p.m. o necesita información sobre pesticidas (lunes-viernes); se habla español e inglés.

O puede llamar a la línea de emergencia (609) 272-7172. Este servicio funciona 24 horas y solo se habla en inglés.

Los dibujos han sido u sados con el permiso
de National Agricultural Chemical Association
(NACA).

67X

State of New Jersey

DEPARTMENT OF HEALTH
CN 360, TRENTON, N.J. 08625-0360

MOLLY JOEL COYE, M.D., M.P.H.
COMMISSIONER

TESTIMONY ON LESNIAK BILL

Good morning! My name is Dr. Christopher-Paul Milne and I am the Pesticide Project Manager for the Department's Division of Environmental & Occupational Health. I am representing the Department of Health at this hearing.

On behalf of Commissioner Coye, I would like to thank you for the opportunity to testify at this hearing on the proposal to amend the 1971 Pesticide Control Act.

This is a comprehensive bill dealing with many complex issues which involve numerous government agencies, business organizations and advocacy groups as well as workers and residents of this state. The Department of Health will restrict its comments to those provisions of the Bill which directly involve the Department.

Sections 1 thru 3 deal with the expansion of the Pesticide Control Council and delineates its functions. The Department of Health is an "ex officio" member of this Council. The Department of Health supports the concept of expanding the Pesticide Control Council and believes that it should serve primarily as a policy advisory board. In an area as scientifically and socially complex as pesticide control, government agencies should seek the input of a broad range of perspectives to guide policy-making.

Section 4 of the Bill formally creates the Pesticide Technical Advisory Committee which consists of 9 members, 2 from the Department of Health, 2 from the Department of Environmental Protection, and five more members with expertise in scientific disciplines appropriate to pesticide evaluations. The Pesticide Technical Advisory Committee advises the Pesticide Control Council and the Department of Environmental Protection with regard to criteria, priority schemes and research needs in the area of pesticide assessments.

This provision would enable the Department of Health to have an official mechanism for providing guidance to the Department of Environmental Protection on the health aspects of pesticide control. It would also afford both departments the opportunity to utilize sources of technical and scientific expertise from outside of state government. Current news items have heightened public awareness of the role of pesticides as "man-made" sources of groundwater and food contamination. Recent reports and subsequent media coverage further alerted the public to the potential adverse health effects both short- and long-term which can be a consequence of pesticide use. The

Department believes that this technical advisory committee will be an excellent vehicle to address these critical concerns and enable our regulatory and health agencies to devote much needed attention to preventable sources of pollution.

Section 11 designates to the Department of Health the responsibility for preparing pamphlets for farmworkers concerning general information on health and safety issues resulting from pesticide exposure and supplying these pamphlets to farmowners.

This section would provide educational materials to a large number of workers, estimated at betwen 18,000 and 30,000 individuals, who are occupationally exposed to pesticides on a daily basis but who are not covered by the current New Jersey Worker & Community Right-To-Know Law. This provision would assist the farmowner in protecting his most valuable resource -- his workers -- as well as to assure that this critical information is uniform, accurate and up-to-date.

Section 13 requires the Department of Health to certify individuals as trainers of farmworkers. This training would include steps to employ to avoid exposure, to recognize and deal with an exposure, and farmworker rights under the law. The techniques and information utilized in such a program must be compatible with OSHA and EPA regulations.

This provision would complement the written educational materials provided to farmworkers in section 11 by creating a cadre of trainers, who could be the farmowners or managers themselves, capable of providing audio or visual presentations.

The Department of Health is uniquely qualified to perform this function since it is the only state agency with a staff specifically trained in occupational health education. In addition, the Department's Occupational Health Service has responsibility for implementing a similar certification program under the New Jersey Worker & Community Right-To-Know Law.

Section 14 mandates the Department of Health to carry out three specific activities. The first is to identify and train health-care providers for farmworkers in pesticide exposure management. The second is a program to alert physicians and other health professionals concerning symptoms, diagnosis, and treatment of pesticide poisonings. Finally the Department of Health must establish a mechanism for physician and veterinarian reporting of incidents of pesticide exposure.

The need for professional education and training on pesticides has been voiced by many quarters - local health officers, citizens, government officials, and even health care professionals themselves. Part and parcel of any program designed to mitigate the adverse consequences of pesticide use must in addition to regulation and education contain a mechanism for the prompt identification of chemicals or practices resulting in excessive exposure and consequent illness.

Section 15 mandates the sharing of pesticide incident reports between departments. Only tracking and follow-up of such pesticide exposures, which will be defined by Department of Health criteria, will enable the Department to adequately investigate problem areas and transfer this knowledge to the Department of Environment Protection for possible regulatory action.

Section 18 enables any person to bring a civil action in law or equity against the Department of Environmental Protection or the Department of Health for failure to enforce the provisions of this bill. Since the Department of Health has no enforcement powers, it considers this an oversight in the language of this bill and should be exempted from such a provision.

We support this legislation because the activities mandated for the DOH are appropriate and reasonable to expect of the primary public health agency of this state. The Department of Health welcomes the opportunity to assume these critical responsibilities. However, its role would necessitate the initiation of some new activities and the expansion of some current ones and thus would require additional resources. The Department can work together with the sponsors of this bill to develop cost projections and discuss potential funding mechanisms.

Pesticides are at the present time an integral part of farming, a difficult and often dangerous profession. Both those who use them and those who benefit from them must be informed of their risks. While the annual death rate for all industries combined is 11 per 100,000, that for agriculture is five times as high. While agricultural workers have a low to normal mortality for all cancers combined they have consistent excesses of hematolgic cancers including leukemia, Hodgkin's Disease, non-Hodgkin's lymphoma and multiple myeloma. Farming could be considered the first and most revered industry of "The Garden State". The Department of Health believes that by working with other state agencies and farming interests it can be our safest industry as well.

TESTIMONY CONCERNING BILL S-3741
TO EXPAND THE SCOPE OF THE PESTICIDE CONTROL ACT OF 1971

MARK LYONS, COORDINATOR OF HEALTH AND SAFETY
CATA: COMITE DE APOYO A LOS TRABAJADORES AGRICOLAS
PO BOX 458, GLASSBORO, NJ 08028 (609) 881-2507

Dr. Fenske has discussed the health effects of pesticide exposure, and how the work that farmworkers do puts them at risk to be exposed to pesticides. One of the consistent arguments we have heard against Bill S-3701 is that it is not necessary: that there really is no problem in New Jersey with farmworkers being dangerously exposed to pesticides. Opponents of this "Pesticide Right to Know Bill" site the lack of formal complaints made by farmworkers to the Department of Environmental Protection and the relative small number of cases identified by health providers who see farmworkers as evidence that no serious problem exists. These opponents argue that Bill S-3741 imposes yet another set of bureaucratic hoops for farm operators to jump through, while addressing a non-existent problem.

Today I would like to address the issue of whether farmworker exposure to pesticides is a problem in New Jersey by doing several things: First I would like to discuss studies done in New Jersey related to farmworker exposure to pesticides. Secondly, I would like to discuss what we have learned while doing pesticide educational programs with farmworkers in New Jersey. Third, I would like to address the issue of under-reporting of pesticide problems among

farmworkers. And, finally, I would like to introudce two farmworkers who will discuss their experiences of being exposed to pesticides while working on farms in New Jersey.

THE PROBLEM IN NEW JERSEY:

In 1983, '84 and '85 Sa-Lantic Health Services, a migrant health center in Hammonton, NJ, did studies of pesticide exposure among NJ farmworkers. In 1983 this one migrant health center found 24 cases of suspected pesticide related illness. 39 cases were identified in 1984, and 34 cases were identified in 1985. In 1988 the NJ Department of Health identified at least 36 cases of pesticide related illness among farmworkers. These cases were identified only among farmworkers who sought treatment.

Furthermore, in interviews of farmworkers done by Sa-Lantic Health Services, it was determined that one-third of the workers surveyed said they had been sprayed while working in the fields, with over half of those saying they had been sprayed dring the current season. About half of the workers sprayed said they had gotten sick, but only twenty-five % of those who felt sick went to a doctor. If only 25 % of farmworkers who develop pesticide illness go for treatment, then a conservative estimate would be that there were at least 144 cases of pesticide related illness in NJ last year among New Jersey's farmworkers.

CATA'S EXPERIENCE DOING PESTICIDE EDUCATION WITH FARMWORKERS IN NEW JERSEY:

Over the last two years CATA has hired and trained farmworkers as health educators, who go to the camps of farms in New Jersey and do educational programs concerning Pesticides and AIDS. In the last year alone we have held 105 such meetings. The content of the pesticide educationals is very similar to the content proposed in Bill S-3741. I would like to share what we have learned from farmworkers while doing these programs:

1. Farmworkers have a vague understanding of the hazards of pesticide exposures. They are aware of the fact that there are acute affects of pesticide exposure, but practically none are aware of chronic effects such as cancer, infertility, birth defects or nervous disorders.

2. Farmworkers know that dramatic events such as being directly sprayed are dangerous; but few understand the dangers of low-grade exposure to pesticide residues, which is much more common.

3. Few farmworkers know the symptoms of pesticide exposure. Many of these symptoms-- such as diarrhea, vomiting, muscle aches and pains, fatigue, skin rashes- are symtpoms whilch are found in other common diseases, such as the flu. When they have these symtpoms, they assume they "probably have a virus", rather than consider pesticide exposure.

4. Because they do not often understand the role of residues in pesticide poisoning, farmworkers frequently do not wear appropriate clothing, or wash their hands before eating, drinking, smoking or going to the bathroom.

5. Farmworkers do not know appropriate first aid in case of a pesticide incident; they do not know symptoms of severe poisoning which require immediate medical treatment; they often do not know where to go for medical treatment.

6. Farmworkers are not aware of the laws established to protect them from pesticides, such as the regulations of the NJ Department of Environmental Protection, or field sanitation regulations. Furthermore, they do not

know how to use these laws, e.g. what is the mechanism for filing a complaint and requesting an inspection of the farm, and whom to call if their is a problem.

7. Farmworkers-- most of whom are migrants-- came here to work as hard and long as they can, in order to save money for them and their families to live on for the rest of the year. Thus, they will only go for health care if they are very ill; and they are terrified of losing their job if they file a formal complaint against the farm operator. They do not know that their name as complainant will be kept confidencial.

What we have learned doing these programs underscores three important things. First, there is a tremendous need by farmworkers to receive basic information concerning pesticides: the hazards, symptoms of poisoning, how to protect themselves in the field, first aid, and how to use the laws designed to protect their health. Second, there is also a tremendous hunger to obtain this information, on the part of farmworkers. Finally, it is clear that if we rely on health provider visits or complaints to the DEP to determine the scope of the pesticide problem, there will be tremendous under-reporting: farmworkers often do not recognize symptoms as pesticide-related; they only go to the doctor if very sick; they do not know what their rights are under the laws, or how to use the laws; and are afraid of filing a complaint and risking their job.

To summarize, the farmworkers of New Jersey are at risk to dangerous exposure to pesticides. Pesticide exposure is in the nature of their occupation. Like all workers, farmworkers should have the right to know what toxic

chemicals they are exposed to, how to protect themselves, and to know that they may exercise these rights without losing their job. Bill S-3741 will provide farmworkers with their basic Right to Know.

Now, I would like to introduce two farmworkers, who will share their experiences working with pesticides in New Jersey.

lestest

DEVELOPMENT OF A VOLUNTARY REPORTING SYSTEM FOR AGRICULTURAL WORKER HEALTH INCIDENTS IN SOUTHERN NEW JERSEY

INTRODUCTION

The State of New Jersey has a long history of hiring migrant farm workers during the summer agricultural season. Recent estimates indicate that from 18,000 to 35,000 workers (80% of whom are of Hispanic origin) each year assist in the planting, cultivating, harvesting, packing and shipping of crops in New Jersey (1,2). This work force helps make New Jersey one of the top states in the nation in the production of blueberries, peaches and cranberries (3).

Despite the large numbers of migrant farm workers, there have been limited data available on the extent of agriculturally-related illness among this group in the State. A recent report found that agriculture is the second most dangerous occupation in the United States, in terms of injury (4). Work hazards include machinery-related injuries, musculoskeletal stress, lack of sanitary facilities and exposure to pesticides.

Many physicians are unfamiliar with the hazards involved in agricultural work, since they are uncommon in the general population. This is especially true of exposure to pesticides, which can have acute or chronic effects capable of mimicking other illnesses (5). Since many of the migrant workers do not speak English, communication barriers between the worker and the health care provider often make it difficult to obtain a satisfactory medical or occupational history. For these reasons, work-related illnesses may go untreated, and opportunities to practice effective preventative health may be missed.

The purpose of this study was to develop a voluntary reporting system for agricultural worker health incidents, in order to determine the extent of work-related problems among migrant farm workers in the state. The system was organized around a surveillance center, the New Jersey Department of Health, which would interact with and receive reports from medical care providers, analyze the reported data regarding work-related illness, and direct action toward the individual workers and the workplace itself, when necessary. Of particular concern was the issue of pesticide-related illness; but in order to ensure complete and accurate reporting, "health incidents" were determined to be any illness encounter between a farm worker and a medical care provider.

REVIEW OF THE LITERATURE

Past studies have indicated that migrant farm workers have an average life expectancy of about 49 years of age (6). Wilk noted that the majority of workers will seek medical help only for an acute condition, rather than for a chronic problem or for preventative services (7). Barger and Reza (1984), in a survey of Hispanic farmworkers in the Midwest, reported that

upper respiratory, dental, back and neck problems were the most frequently reported complaints (8).

Statistics from California, where much of the research into farm worker problems has taken place, show that dermatitis is the most frequently reported occupational disease among agricultural workers. While the vast majority of cases are due to plant exposures, 16% were attributed to pesticide use (9).

The extent of acute and chronic pesticide poisoning among farm workers is not well known. Coye (1985) suggests that systemic pesticide illness is markedly underreported, due to the nonspecific nature of some of the symptoms, lack of physician recognition of signs and symptoms, as well as social and political influences in the agricultural community (10). Barger and Reza state that farm workers in their study reported having been sprayed or exposed to pesticides in some manner an average of 6.6 times per year, with 21% having been sprayed or exposed 10 times or more (11). A similar survey found that 42% of the workers questioned reported having been sprayed with pesticides while working (12). Despite the only law in the country that mandates physicians to report all suspected cases of pesticide induced illness or injury, state health officials in California have estimated that as few as one percent of these cases are reported (13).

The symptoms and treatment of moderate to severe poisoning due to organophosphate cholinesterase-inhibiting pesticides (many of which are commonly used in agriculture) are well known (14). However, less is understood about the harmful effects of sub-acute exposure to these pesticides, or the long-term effects they may have on a worker's health.

Diagnosis of mild cases of organophosphate poisoning is largely dependent upon determination of cholinesterase inhibition, measured by plasma or red blood cell cholinesterase levels (15, 16). Since the normal range of cholinesterase activity is very wide, Coye (1986) notes the importance of obtaining pre-exposure baseline cholinesterase levels in those individuals handling or applying organophosphate pesticides (17)(18).

In summary, there are limited definitive data available to determine the extent of agriculturally-related illness among migrant farm workers. What information is available, particularly from California, suggests marked underreporting of all types of worker health incidents, especially those involving pesticide-related illness.

DESIGN AND CONDUCT OF THE STUDY

Methodology

The study was carried out between June 1, 1988 and September 15, 1988. The first step in the development of a voluntary reporting system which began in early summer 1988 was the identification of the principal providers of health care for migrant workers in the five-county Southern New Jersey area. A telephone survey was utilized to contact over one hundred private physicians, hospital emergency departments and ambulatory care centers to

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identify providers, explain the purpose of the project, and determine what interest there was in participation. All providers were asked the following questions:

- Did you examine any agricultural workers, for example, migrant farmworkers, dayhaulers, seasonal dayworkers or farmers?
- If yes, approximately how many? How often?
- Would you be willing to participate in a project by filling out a form pertaining to pesticide problems in this population?

It was decided to include all types of agricultural workers (seasonal, dayhaulers, and even the farmers themselves) in the hopes of generating a greater level of response and cooperation. Concern for all persons exposed to pesticides was stressed. Providers were also told that they would be asked to record "each and every illness encounter with a farmworker." This was done to eliminate pre-selection of pesticide related cases or misdiagnosis due to provider non-recognition of symptoms.

From this survey, ten hospital emergency departments and two ambulatory health care facilities (the latter providing an estimated 85% of farmworker health care) were identified and agreed to participate in the study. (See Appendix A for a list of these facilities). Physicians in private practice were eliminated from the project because there were too few in number. The results of the survey indicated that the emergency departments provided episodic care to most of the remaining 15% of the workers. It is important to note that dayhaulers, many of whom are Southeast Asians and live in Philadelphia probably do not seek care in the health care facilities included in this study. No attempts were made to specifically include medical care providers for these workers because of the difficulties in identifying them.

Once the providers were identified, an educational presentation on the health care needs of migrant workers was arranged at each health care site. Included in this information were signs and symptoms of pesticide exposure, types of pesticides used locally for specific crops, and technical resources (e.g. Department of Health, EPA's Bureau of Pesticide Control) available for consultation. Two publications, The Occupational Health of Migrant and Seasonal Farmworkers in the United States, by Valerie A. Wilk of the Farmworker Justice Fund, Inc., and an EPA publication, Recognition and Management of Pesticide Problems, 3rd Edition, were identified as resources for the providers. A contact person, usually the nurse manager or medical director, was selected at each site to coordinate and expedite the referral system. Intake workers at each site were advised of the need to determine the occupation of all incoming patients, in order to identify all migrant farmworkers.

A consent for release of information was developed (see Appendix B) to be signed by all farm workers who presented with a health problem to a provider. The form was translated into Spanish. It was agreed that one copy of the form would be given to the worker, one copy retained in the medical record, and one copy given to the Department of Health fieldworker. All sites were informed that the fieldworker would be making periodic visits

to collect and review these consent forms, review charts, conduct follow-up interviews with the workers, and be available to answer questions from staff members.

Begining June 1, 1988 each of the participating agencies was contacted on a weekly basis by the fieldworker to determine if reports were coming in and if follow-up was needed. If on review of the patient's symptoms, physical examination findings, laboratory data, etc., the fieldworker determined that there was a high index of suspicion for pesticide poisoning, arrangements were made to interview the worker directly. Criteria for selection included any of the following:

- worker complaints of exposure to pesticides, via aerial or ground spraying, premature re-entry into the field after spraying, handling of recently sprayed crops, etc.

- dermatitis of any type, especially if involving the hands, arms, face or genitals

- conjunctivitis

- pharyngitis, especially in the absence of infection.

- pulmonary problems, e.g. shortness of breath, dyspnea, cough, chest pain, rhinorrhea, especially if the worker had no previous history and was afebrile. (This often required further investigation, since a large number of the workers smoke cigarettes.)

- nausea, vomiting and/or diarrhea, especially if afebrile, and no history of GI problems or food intolerances

- neurological symptoms, e.g. paresthesias, tremors, ataxia, loss of consciousness, seizures.

From the study onset there was considerable concern for the confidentiality of the farm workers. It was felt that a worker might feel uncomfortable if a visit was made to the farm by the fieldworker alone, for fear that he was being "singled out." Other workers might fear retaliation from the farmer if a pesticide-related problem was discovered. There was a concern that some farmers might refuse to permit the fieldworker to interview the worker, especially since farmers were given no advance notice of the project. (The Department of Health has no enforcement authority in cases of pesticide violations; enforcement activities are carried out by the Department of Environmental Protection, Bureau of Pesticide Control.)

It was decided to have the fieldworker work in conjunction with other agencies providing health care. Follow-up interviews might be conducted during clinic visits, or camp screenings run by the ambulatory care centers, or in the hospital emergency departments themselves. Workers would be told in advance by staff members that they might be contacted by the bilingual fieldworker. This was important since most of the workers spoke only Spanish.

A questionnaire was devised for the follow-up interview (See Appendix C). The questionnaire which was administered by an interviewer, took approximately 15 minutes to complete. Whenever possible, much of the demographic information was obtained directly from the patient's chart, leaving the worker free to discuss his problem. Workers were advised, at the beginning and end of the interview, that the information was being used "as part of a study of pesticide-related problems in farm workers like yourself." This information would only be shared with other persons (e.g. Bureau of Pesticide Control) if there was a violation in the use of pesticides in the workplace, and if the farmworker agreed to let the fieldworker relay this information. The symptoms listed in the questionnaire were included since they are those most commonly noted in pesticide exposure. The questionnaire was not pretested prior to use.

Problems identified and modifications made during course of the study

The data collection phase took place between June 1, 1988 and September 15, 1988, corresponding with the peak summer agricultural season. Several problems were identified during this period, necessitating modifications in the reporting system. These included:

1) Lack of reports submitted from several sites - It became clear that the majority of worker reports came from a small number of sites. The fieldworker maintained contact with all of the sites, but with some on a less frequent basis. Factors, e.g. decreasing amount of land devoted to farming, changing patterns of health care providers and usage by migrant workers, and lack of bilingual staff, particularly in hospital emergency departments, probably affected this pattern. Several sites reported that the decrease in migrant workers was highly unusual for them.

2) Large geographical area for follow-up - It became difficult to schedule follow-up appointments in accordance with clinic appointments in several different locations. As a result, follow-up interviews took priority over routine visits, as they were more likely to yield information from workers. In some cases, time was better spent identifying and following up workers in the same evening, at the same site, particularly if there were many workers to be seen on that occasion. In some instances, clinics scheduled the patient's follow-up appointment in accord with the fieldworker's schedule.

3) Poor worker compliance with follow-up visits - For various reasons to be discussed later, workers often did not keep appointments for follow-up interviews. Attempts to circumvent this, e.g. telephone calls, contacts by clinic outreach workers, were largely unsuccessful. These suspected cases of pesticide exposure without worker interviews made up a large number of total cases.

4) Lack of physician awareness in diagnosis and management of pesticide related problems - Several of the sites had a rotating schedule of physicians on call, so that the attempts made earlier in the study to reach all of the providers regrettably fell short. A significant portion of the fieldworker's time during the data gathering phase was spent in education of house staff, especially physicians. Educational

efforts did appear to increase interest in the subject, and probably resulted in an increase in the number of referrals.

5) Worker lack of knowledge regarding symptoms of exposure, necessary clothing, re-entry time, etc. - In administering the questionnaire, it became apparent that a number of the pesticide-related cases could be attributed to the worker's improper clothing, lack of hand washing, eating or drinking in the field, etc. In addition to the one-on-one education in the follow-up interviews, the Department of Health fieldworker contacted other agencies, e.g. the Bureau of Pesticide Control, and CATA, the farmworker's labor organization. These agencies were able to provide written and audiovisual materials to the workers via camp visits, union meetings, etc. Written materials were also given to the providers themselves to help make them more aware of preventative measure. (See Appendix D for copies of these materials.)

6) Lack of existing network for the reporting of cases - As noted, the Department of Health has no enforcement power in the event of violations in the use of pesticides. It became obvious that it would be unethical to collect data on pesticide exposure without informing the Bureau of Pesticide Control (BPC) of such problems. In the past, the BPC relied on direct complaints, initiated by the worker himself, in order to investigate pesticide-related health problems. The Department of Health was now able to coordinate reports from a number of providers and relay this information to the BPC. The fieldworker met with BPC staff on a number of occasions to discuss these reports, but found that enforcement of regulations concerning use of pesticides was difficult. Farm workers were often unclear about the time and the place of exposure. When approached by BPC staff, farmers sometimes simply denied that it had occurred. BPC staff found it difficult to locate the farmers, who were often "unavailable" at the time of the visit.

7) Lack of cooperation by reporting sites - Not all of the reporting sites felt they could comply with the original outline of the project. Staff at two sites reported they could not realistically have a consent form signed by every migrant worker they treated, as there would be several hundred of them. Rather than eliminate these sites from the study, the Department of Health consented to have these agencies submit forms only for those cases that the examining physician felt to be pesticide related. This admittedly introduces a great deal of bias into the study. At both sites, the fieldworker attempted to ensure that all physicians present were well versed in the recognition of pesticide-induced illness.

Another reporting site, an ambulatory care facility that frequently made outreach visits to the farm worker camps, refused to let the Department of Health fieldworker accompany staff on screening visits to the camps, for fear of problems with the community's farmers. To circumvent this, the Department of Health fieldworker instructed those outreach workers who visited the camps to refer all cases of suspected pesticide exposure to the clinic for evaluation. This approach appeared to work fairly well.

There were some initial problems at other sites involving obtaining permission to view the medical records of the workers involved. In these cases, agency staff had strong ties to the farming community, and appeared to view the study as a "farmer vs. worker" struggle. It became clear that there was a need to present the problems of pesticide exposure, and indeed of any occupationally related illness, as common to anyone involved in agricultural work. A modification was also made to the signed consent form that allowed the fieldworker to view only those records pertaining to the particular period of illness. Each subsequent exposure would require an additional signed consent form.

8) Additional provider - late in the study, it was discovered that a private physician saw several hundred workers from a particular camp. Because of logistical problems involved in obtaining signed consent forms from these workers so late in the season, this provider was unable to provide the Department of Health with any statistics.

RESULTS

Tables 1-5 report the results of data collected between June 1, 1988 and September 15, 1988 from the twelve reporting sites.

Table 1 shows the total number of reports received per site, as well as the number of pesticide and non-pesticide-related reports. One hundred sixty-one of the two hundred twenty reports (73.2%) were non-pesticide-related illnesses, with the remaining thirty-six (16.4%) being "probably" pesticide-related, and twenty-three (10.5%) "possibly" pesticide-related.

Seven out of twelve facilities reported cases and most cases came from one clinic.

"Probable" pesticide-related cases are those where the following criteria are met:

1. direct evidence of pesticide exposure through worker history
2. physical symptoms that reflect this exposure
3. no other likely explanation for the symptoms

The term "probable" was chosen since none of the reported cases were verified by a corresponding decrease in red blood cell cholinesterase levels. Thirteen of the thirty-six, or 36% of these "probable" cases were interviewed by the fieldworker to verify the exposure.

"Possible" pesticide-related cases are these where one or more of the following conditions were present:

1. limited or questionable exposure through worker history
2. physical symptoms that may be due to this exposure
3. no other likely explanation for the symptoms

Follow-up appointments with these workers either could not be arranged, or the workers did not comply with the follow-up appointment times.

Table 2 shows the distribution by cause of those conditions most commonly found to be non-pesticide related. The table lists the illnesses in broad categories, and is limited to cases from the four sites reporting non-pesticide-related illnesses. Forty of the one hundred sixty-one non-pesticide-related illnesses (24.8%) were due to either upper or lower respiratory tract diseases. The vast majority of these were found in one clinic with a large number of cases of bronchitis and pneumonia due to Mycoplasma pneumoniae. Most of the workers came from 1 or 2 camps in the surrounding area. Thirty-eight of the one hundred sixty-one (23.6%) were due to accidents or trauma, usually associated with machinery or falls. It is noted that this category made up the bulk of patients seen in the hospital emergency departments. Twenty-seven of the one hundred sixty-one (16.8%) of the patients presented for management of chronic problems, most notably hypertension and diabetes. The majority of these patients were older workers, and all were seen through one of the ambulatory care clinics servicing migrant workers. Musculoskeletal complaints and gastrointestinal problems each accounted for approximately 7.5% of the total number of non-pesticide-related illnesses. Musculoskeletal problems were differentiated from accidents/trauma, in that for the former, there was no single incident that appeared to have precipitated the symptoms. Examples included low back pain and arthralgias. Gastrointestinal disorders included a variety of problems, e.g. constipation, peptic ulcer disease and infectious hepatitis.

Table 3 summarizes the type of exposure to pesticides experienced by those workers in the "probable" category. Data in this table were obtained from worker records and interviews, when possible. Twelve of the thirty-six (33%) of the workers, while noting they had been exposed to pesticides, did not specify how they were exposed. None of these workers received follow-up interviews to verify exposure. In those that did specify, eight of the thirty-six (22.2%) noted handling of recently sprayed crops, and six of the thirty-six (16.6%) reported having been exposed to aerial spraying. The only patient in the study who required hospitalization for symptoms of pesticide-related illness was in this group. The "unknown" group consisted of three workers who exhibited multiple symptoms of pesticide exposure (e.g. conjunctivitis, respiratory problems, and dermatitis) and who were aware of pesticides being used on the farm, but could not recall specific events leading to exposure.

Table 4 summarizes the frequency of symptoms presented among those workers with probable or possible pesticide-related illness. The most common complaint was dermatitis, followed by respiratory symptoms. These data are somewhat difficult to interpret, since some of the workers (especially those in the "probable" category) had multiple symptoms, while others in the "possible" category had no symptoms, despite a positive history of exposure. If a worker complained of more than one symptom, the worker was counted more than once in the table.

Table 5 provides data on the use of protective clothing. All of those responding to this question were in the "probable" group, including all those who participated in follow-up interviews, and some who did not. The group was about equally divided between those workers who reported having used protective clothing (including gloves, long-sleeved shirts and pants), and those who did not. Workers who had not worn the clothing were more

likely to have experienced dermatological problems, while those who did were more likely to have complained of respiratory symptoms. A few workers noted random use of the clothing, and did not remember if they wore it or not during the period of exposure.

Red blood cell cholinesterase as a means of diagnosing cases of organophosphate pesticide poisoning

The only definitive method of diagnosing cases of organophosphate pesticide poisoning is determination of suppression of the red blood cell (RBC) cholinesterase. However, there were several problems identified in the study that made this determination, and subsequent development of a definitive diagnosis, difficult.

1) RBC cholinesterase is a relatively expensive laboratory test, and the majority of migrant workers have no health insurance. Several of the reporting sites were not willing to absorb the cost for testing large numbers of workers.

2) As noted, a baseline RBC cholinesterase should be drawn prior to exposure, and serial levels obtained once the worker has been removed from the worksite, in order to verify the diagnosis (21). None of the workers in the study had either baseline or serial determinations performed.

3) As noted, only 1 worker became ill enough to require hospitalization. The random RBC cholinesterase performed on admission was 3922 IU/L, well within the normal range of 2375-4750 IU/L. Although this finding neither proves nor disproves the diagnosis of pesticide-induced bronchospasm, one might have expected a greater suppression in this patient due to the severity of the illness.

4) Although organophosphates are frequently used, they are not the only class of pesticides utilized in the Southern New Jersey area. RBC cholinesterase levels would not be expected to drop following exposure to other classes of pesticides. In this study, we were not able to obtain the data to correlate the symptoms with the use of any particular group of pesticides.

CONCLUSION

In this study, approximately 75% of all the migrant health incidents reported were not related to pesticide usage. The majority of these incidents involved upper and lower respiratory illnesses, accidents/trauma, and to a lesser extent, management of preexisting chronic conditions. These findings are in keeping with those reported in previous studies, and also support the belief that workers are most likely to seek medical assistance for an acute problem, particularly if it prevents them from working. These data would suggest that health education programs, particularly those aimed at injury and illness prevention, might benefit farm workers.

As many as 25% of the worker health incidents in the study involved exposure to pesticides, although only one worker was ill enough to require hospitalization.

This study pointed out the need for greater follow-up of larger numbers of pesticide-exposed individuals in order to verify exposure and to institute appropriate health education activities. Factors such as long workdays, fear of loss of job and farmer retaliation (whether real or imagined) probably played a significant role in the inability of the fieldworker to interview farm workers.

The establishment of a formal network between the reporting sites, Department of Health, Bureau of Pesticide Control, Department of Labor, Department of Agriculture, and the farmers themselves is necessary to identify and correct violations in pesticide usage that can affect workers, farmers, and anyone residing in an area where pesticides are used extensively. Having access to shared data (e.g. application records) will improve the accuracy of diagnosis, particularly in cases of organophosphate poisoning.

Physicians and other health care providers practicing in rural areas need to become more aware of the unique problems associated with migrant farm workers, including diagnosis and treatment of pesticide-related illness. The Department of Health could sponsor in-service training programs that offer Continuing Medical Education credits to these providers, and at the same time, establish a system for provider consultation through the Department of Health. Although somewhat more difficult, a similar attempt should be made to contact those physicians who, in their private practice, see a large number of dayhaulers. The Department of Health may need to coordinate services with the City of Philadelphia to accomplish this.

SUGGESTIONS FOR IMPROVING THE REPORTING SYSTEM

1. Additional studies need to be conducted to more clearly determine the extend of pesticide related illness among migrant farmworkers.

2. Follow-up interviews with larger numbers of workers who have reported pesticide exposure could be done in a number of ways. The Department of Health could utilize a larger number of fieldworkers to collect the data and conduct follow-up interviews. While this may require additional funding, it would most likely result in a clearer picture of the extent of pesticide-related illness. Another alternative would be to have the Department of Health designate one or more employees at each reporting site to assist in the data collection process, perhaps providing a small financial incentive to do so.

3. Eliminating reporting sites that rarely see migrant workers would help to streamline the reporting system. If additional workers could be hired, it might be valuable to have each fieldworker focus on one of two particular camps.

4. If the study is continued, farmers should be made aware of this prior to the growing season, perhaps through the Department of Agriculture. Since the Department of Health is a relatively "neutral" party, farmers who are aware in advance and expect visits from the Department of

Health fieldworker to interview farmworkers, may not feel that they are "under surveillance".

5. In order to provide follow-up for larger numbers of pesticide-exposed individuals a better relationship has to be established between field workers and farm workers. Opportunity for involving representatives of the migrant community in a surveillance system should be explored.

6. Some thought should be given to the development of a mandatory reporting system for pesticide related health incidents. The argument can be made that reporting sites would be more likely to comply if there were state regulations.

SUGGESTIONS FOR OTHER RELATED STUDIES

1. Since a large number of the farm worker incidents involved accidents/trauma, it would be useful to conduct a study to determine under what conditions injuries are most likely to occur. Examples of factors that might be studied are the type of machinery, crops involved, concurrent use of alcohol, etc.

2. With the life expectancy of these workers so much shorter than other males in the United States, it may be useful to determine the most common causes of death within the group. Little is known, for example, about the relationship between long term exposure to pesticides and subsequent malignancies. Since most of the cases of chronic disease in the group were either diabetes or hypertension (particularly the latter), it might be worthwhile to focus on early detection of hypertension among workers. It is probably no coincidence that the typical Puerto Rican diet is high in sodium, possibly predisposing workers to hypertension.

APPENDIX A

LIST OF AGENCIES PARTICIPATING IN STUDY OF AGRICULTURAL HEALTH WORKER INCIDENTS

Clinics

Bridgeton Area Health Services

Salantic Health Services - Hammonton

Salantic Health Services - Pennsgrove

Hospitals

Elmer Hospital

Garden State Hospital

JFK - Washington Twp. Division

Kessler Hospital

Newcomb Hospital

Salem Hospital

West Jersey Eastern Division

Bridgeton Hospital

Underwood Hospital

90X

New Jersey State Department of Health
Division of Occupational and Environmental Health
CN 360, Trenton, NJ 08625-0360

REPORT OF AGRICULTURAL WORKER HEALTH INCIDENT AND MEDICAL INFORMATION RELEASE

Name of Worker (Print)	Date of Encounter

Labor Camp Where Worker Currently Lives	Farm/Address Where Worker Currently Employed

Reason(s) for Medical Encounter (i.e., Complaints)

Name and Address of Treating Medical Provider	Telephone Number

CONSENT TO RELEASE OF MEDICAL INFORMATION
(To be signed by agricultural worker in presence of witness)

I agree to letting _____ *give to the New Jersey State Department of Health, copies of the medical*
(Name of Hospital/Clinic)
records from my visit of _____ *to this hospital/clinic. These records will be used for a study of sickness from*
(Date)
chemicals used on farms and nothing else. The Department of Health is not allowed to give these records to anyone else.

Signature of Worker _____ *Date* _____

Signature of Hospital Representative _____

Title of Hospital Representative _____

Yo estoy de acuérdo a permitir _____ *en darle al Departaménto de Salúd de New Jersey cópias*
(Nómbre de hospitál/clinica)
de records médicos al hospitál de me visita de _____.
(Fécha)
Estos records seran usádos para estúdios de enfermédades químicas usados en las fincas nada más. El Departaménto de Salúd no esta autorizádo
a darle estos records a nadie mas.

Firma _____ *Fécha* _____

Firma de Representanté de Hospitál _____

Titulo _____

OES- 88
APR 88 Distribution: White-NJSDH Canary-Hospital Pink-Patient

91 X

PATIENT QUESTIONNAIRE
AGRICULTURAL WORKERS HEALTH INCIDENTS
NEW JERSEY - SUMMER - 1988

I.D. No. |___|___|___|___| Interview Date: |___|___| - |___|___| - |___|___|
Month Day Year

Name (First: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

(Middle): |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

(Last Full): |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

Address: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

City: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

State: |___|___| Zip Code: |___|___|___|___|___|

Telephone Number: (area code) |___|___|___| - |___|___|___| - |___|___|___|___|

Race (check one):
1. Hispanic . . . . . _____ 1.
2. Black, non Hispanic . . . . . _____ 2.
3. White, non Hispanic . . . . . _____ 3.
4. Asian or Pacific Islander . . . . . _____ 4.
5. Other (specify) . . . . . _____ 5.

Sex (check one):
1. Male . . . . . _____ 1.
2. Female . . . . . _____ 2.

Date of Birth: |___|___| - |___|___| - |___|___|

Labor Camp (current): |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

Farm where employed: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

Address: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

Type of work: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

Farm where employed when ill: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

Crop(s) worked when ill: _____

_____

Was there known exposure to pesticides during the 48 hours prior to illness? Yes___1.

No___ 2.

Date(s) of exposure: _____, _____, _____

Name of pesticide(s) _____ |___|___|

_____ |___|___|

_____ |___|___|

Was protective equipment used? . . . . . Yes ___ 1.
If yes: No ___ 2.
Type: _____

_____

Was exposure due to:

Premature entering of field . . . . . Yes ___ 1.
No ___ 2.

Direct exposure to aerial spraying . . . . . Yes ___ 3.
No ___ 4.

Handling recently sprayed crops . . . . . Yes ___ 5.
No ___ 6.

Ingestion of pesticide . . . . . Yes ___ 7.
No ___ 8.

Mixing of pesticides . . . . . Yes ___ 9.
No ___ 0.

Application of pesticide . . . . . Yes ___ 1.
No ___ 2.

Proximity to spraying application . . . . . Yes ___ 3.
(ground-spraying) No ___ 4.

Unknown . . . . . ___99.

Symptoms (check either yes or no)

General

Thirst (Le dio sed?)	Yes ___ 1. No ___ 2.
Garlic odor to breath (Su aliento hue lio a ajo?)	Yes ___ 3. No ___ 4.
Rotten cabbage odor to breath (Su aliento hue lio a repollo podrido?)	Yes ___ 5. No ___ 6.
Bitter almond odor to breath (Su aliento hue lio a almendras amargas?)	Yes ___ 7. No ___ 8.
Hot sensation (Le ha dado sensacion de calor?)	Yes ___ 9. No ___ 0.
Chills (Le ha dado escalofrios?)	Yes ___ 1. No ___ 2.
Fever (Le dio fiebre?)	Yes ___ 3. No ___ 4.
Anorexia (Aperdido la apetito?)	Yes ___ 5. No ___ 6.

Skin and Mucous Membrane

Pallor (Le dio palidez?)	Yes ___ 7. No ___ 8.
Rash (Le han salido ronchas?)	Yes ___ 9. No ___ 0.
Blisters or burns (Ha tiendo empollas o quemaduras?)	Yes ___ 1. No ___ 2.
Dry cracked skin of hands (Ha tenido la piel reseca en sus manos?)	Yes ___ 3. No ___ 4.
Jaundice (Ictericia) (Ha tenido la piel amarilla?)	Yes ___ 5. No ___ 6.
Yellow stain to skin (Coloracion amarilla) (Ha tenido manchas amarilla en la piel?)	Yes ___ 7. No ___ 8.
Ecchymoses (Ha tenido parchos negro en cualquier parte de su cuerpo?)	Yes ___ 9. No ___ 0.
Cyanosis - (Cianosis)	Yes ___ 1. No ___ 2.

Brittle nails . . . . . Yes ____ 3.
(Se le rompieron las unas facilmente?) No ____ 4.

Loss of nails . . . . . Yes ____ 5.
(Aperdido las unas?) No ____ 6.

Alopecia . . . . . Yes ____ 7.
(Aperdido su pelo?) No ____ 8.

Diaphoresis . . . . . Yes ____ 9.
(Sudo demasiado?) No ____ 0.

Pharyngitis . . . . . Yes ____ 1.
(Le dolio la garganta?) No ____ 2.

Conjunctivitis (conjuntivas irritadas) . . . . . Yes ____ 3.
(Le dio irritacion en los ojos?) No ____ 4.

Central Nervous System

Headache (cefalea) . . . . . Yes ____ 5.
(Le dio dabor de cabeza?) No ____ 6.

Tremors . . . . . Yes ____ 7.
(Le dio temblores?) No ____ 8.

Fasciculation . . . . . Yes ____ 9.
(Le temblaron los musculos) . . . . . No ____ 0.

Paresthesia . . . . . Yes ____ 1.
(Se le durmieron partes de su cuerpo?) No ____ 2.

Ataxia . . . . . Yes ____ 3.
(Puede mantener el equilibrio sin dificultod?) No ____ 4.

Mental Confusion . . . . . Yes ____ 5.
(Si alguna ves se la sentiado confuso de la mente?) . . . . . No ____ 6.

Sudden Unconsciousness . . . . . Yes ____ 7.
(Perdiste su consencia de momento?) No ____ 8.

Convulsions . . . . . Yes ____ 9.
(Ha tenido convulsiones?) No ____ 0.

Gastrointestinal Tract

Salivation . . . . . Yes ____ 1.
(Se le salio la saliva sin querer?) No ____ 2

Nausea . . . . . Yes ____ 3.
(Le dio nausia?) No ____ 4.
Vomiting . . . . . Yes ____ 5.
(Le ha dao vomitos?) No ____ 6.

Abdominal Cramps . . . . . Yes _____ 7.
(Le ha dao dolores en su estomago?) No _____ 8.

Diarrhea . . . . . Yes _____ 9.
(Le ha dao diarreas?) No _____ 0.

Melena . . . . . Yes _____ 1.
(Le ha salido su escreta negra?) No _____ 2.

Luminescence of stool . . . . . Yes _____ 3.
(Le brilla su escreta?) No _____ 4.

Respiratory System

Nasal Congestion . . . . . Yes _____ 5.
(Se le tapo su naris?) No _____ 6.

Rhinorrhea (Rinorrea) . . . . . Yes _____ 7.
No _____ 8.

Wheezing . . . . . Yes _____ 9.
(Oyio un sonido en su pecho cuando respira?) No _____ 0.

Chest Pain . . . . . Yes _____ 1.
(Le ha dado dolor en su pecho?) No _____ 2.

Dyspnea . . . . . Yes _____ 3.
(Se ha a quedado corto de respiracion?) No _____ 4.

Tachypnea . . . . . Yes _____ 5.
(De momento he respirado lijero?) No _____ 6.

Cough . . . . . Yes _____ 7.
(Ha tenido tos?) No _____ 8.

Expectoration (frothy sputum) . . . . . Yes _____ 9.
(Le ha salido baba de su boca?) No _____ 0.

Were any of the above symptoms present prior to present illness? . . . Yes _____ 1.
If yes, No _____ 2.

a. Were you employed on a farm at that time? . . . . . Yes _____ 1.
No _____ 2.

TABLE 1

PESTICIDE AND NON-PESTICIDE RELATED AGRICULTURAL HEALTH INCIDENTS BY SITE: NEW JERSEY DEPARTMENT OF HEALTH VOLUNTARY REPORTING PROJECT, JUNE 1, 1988 - SEPTEMBER 15, 1988

SITE	TOTAL # OF REPORTS	# PROBABLE PESTICIDE	# POSSIBLE PESTICIDE	# NOT PESTICIDE	# INTERVIEWED
Clinics					
Bridgeton Area Health Services	147	18	11	118	11
Salantic-Hammonton	9	9	0	0	1
Salantic-Pennsgrove	5	2	3	0	0
Hospitals					
Elmer	9	1	1	7	0
Garden State	0	0	0	0	0
JFK-Washington Twp. Division	*2	1	0	0	1
Kessler	42	5	7	30	0
Newcomb	0	0	0	0	0
Salem	0	0	0	0	0
West Jersey Eastern Division	0	0	0	0	0
Bridgeton	0	0	0	0	0
Underwood	7	0	1	6	0
TOTAL	** 220	36 (16.4%)	23 (10.5%)	161 (73.2%)	13

* One report from private physician regarding a patient hospitalized here; one report erroneously submitted.

** Excluding one erroneous report.

TABLE 2

NON-PESTICIDE-RELATED AGRICULTURAL WORKER HEALTH INCIDENTS BY SITE AND CONDITION: NEW JERSEY DEPARTMENT OF HEALTH VOLUNTARY REPORTING PROJECT, JUNE 1, 1988 - SEPTEMBER 15, 1988

SITE	TOTAL # OF REPORTS	UPPER & LOWER RESP INFECTIONS	ACCIDENTS/ TRAUMA	CHRONIC ILLNESS	MUSCULO-SKELETAL	OTHERS
Clinics						
Bridgeton Area Health Services	118	36	13	27	10	32
Hospitals						
Elmer	7	1	4	0	0	2
Kessler	30	2	18	0	1	9
Underwood	6	1	3	0	1	1
TOTAL	161	40 (24.8%)	38 (23.6%)	27 (16.8%)	12 (7.5%)	44

98X

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TABLE 3

TYPE OF EXPOSURE REPORTED IN
PESTICIDE-RELATED AGRICULTURAL WORKER HEALTH INCIDENTS:
NEW JERSEY DEPARTMENT OF HEALTH VOLUNTARY REPORTING PROJECT,
JUNE 1, 1988 - SEPTEMBER 15, 1988

TYPE OF EXPOSURE	NUMBER OF REPORTS	(%)
Aerial spraying	6	16.7
Ground spraying	1	2.8
Premature re-entry	2	5.6
Handling of recently sprayed crops	8	22.2
Mixing of pesticides	0	-
Application of pesticides	1	2.8
Ingestion of pesticide	2	5.6
Use of topical insect repellent	1	2.8
Unknown	3	8.3
Not specified	12	33.3
TOTAL	36	(100)

TABLE 4

TYPES OF SYMPTOMS REPORTED IN
PESTICIDE-RELATED AGRICULTURAL WORKER HEALTH INCIDENTS:
NEW JERSEY DEPARTMENT OF HEALTH VOLUNTARY REPORTING PROJECT,
JUNE 15, 1988 - SEPTEMBER 15, 1988

SYMPTOM	NUMBER OF REPORTS
Respiratory symptoms	12
Dermatitis	25
Conjunctivitis	3
Neurological problems	2
Gastrointestinal problems	

TABLE 5

USE OF PROTECTIVE CLOTHING REPORTED IN
PESTICIDE-RELATED AGRICULTURAL WORKER HEALTH INCIDENTS:
NEW JERSEY DEPARTMENT OF HEALTH VOLUNTARY PROJECT,
JUNE 15, 1988 - SEPTEMBER 15, 1988

USE OF PROTECTIVE CLOTHING	TOTAL #	# OF REPORTS	# OF INTERVIEWS
Yes	8	4	4
No	9	0	9
Don't remember	3	3	0

100 %

New Jersey State Library

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PESTICIDE REPORT - 1985

An annual update on the occupational experiences
of southern New Jersey farmworkers with pesticides

Prepared by: Lynne J. Steinberg

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PESTICIDE REPORT - 1985

Sa-Lantic Health Services, Inc.

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Introduction

This report was conceived and developed as part of the continuing documentation of farmworker exposure to pesticides and the prevalence of related health problems which began in the summer of 1983. It is a followup document to the reports of 1984 and 1983 which first brought to the attention of both public agencies and the public generally the problem of occupational pesticide exposure among farmowrkers working in the fields of southern New Jersey. These earlier reports were based on a nonrandom, convenience survey which included a questionnaire developed in 1983 by Ms. Valerie Wilk.

A summarization of these earlier reports will be reviewed briefly in the following section: Over the two year survey period (1983-1984), the total number of workers questioned about their pesticide exposures or identified as having a suspected pesticide-related illness, totaled 121. A comparison of the results generated in the two different seasons revealed little change in the fundamentals or in the extent of the problem of pesticide exposure among surveyed workers. Forty-eight percent (48%) of those surveyed in 1984 against thirty-three percent (38%) in 1983 had been sprayed and thirty-eight percent (38%) against thirty percent (30%) had worked in a field that had just been sprayed or was still wet from pesticides. All together, over the two year, two-season farmworker survey, 30 Sa-Lantic patients with three or more symptoms associated with pesticide-related illness were identiifed.

Recommendations for both years emphasized increased and stricter enformcement, more educational opportunities for both farmworkers and farmers and health personnel, and the need for expanded studies to better delineate the magnitude and severity of the occupational exposure of farmworkers in southern New Jersey to pesticides and its health effects.

In many ways, this report is a logical outgrowth of these earlier efforts to establish that a problem exists for farmworkers working in the fields of southern New Jersey. In several other important regards however, this report differs from the efforts made in previous years. These include improvements in data collection and a movement from a survey design into a case study design more approporate to the major thrust of the overall farmowrker health program of which this ongoing study is just one part.

The purposes of this report are five-fold:

1) to serve as an ongoing,annual update of the current situation vis-a-vis the prevalence of suspected pesticide-related illness among Sa-Lantic farmworker patients.

2) to serve as the primary mode to communicate this situation within a health care provision and public policy framework

3) to inform and influence those decisions made in the public arena in a positive and constructive manner which make a significant impact on the living and working conditions of farmworkers in southern New Jersey.

4) to assess the impact of new initiatives (and the progress being made as a result of these initiatives) in reducing both the actual and the potential exposures to pesticides of farmworkers in southern New Jersey.

5) to establish a mechanism or baseline of information and data for use in future investigations, especially those designed to identify any long-term or slowly-developing health effects from chronic, low-level occuational exposure to pesticides among farmworkers.

Methodology, Sources of Data and Data Collection Procedures

The sample population examined in this report are exclusively Sa-Lantic patients identified at either of our permanent clinic sites or during any campsite or other offsite visit. Patients tagged for inclusion in this study were identified by our medical staff as a suspected case of pesticide-related illness based on our pesticide protocol and their personal medical judgement. Sa-Lantic's current pesticide protocol, attached at the end of this report, delineates those factors which, when present, indicate a diagnosis of suspected pesticide poisoning. This protocol was based on a model developed by Antonio R. Velasco, M.D. in consultation with Molly Coye, M.D. of NIOSH (National Institute of Occupational Safety and Health) and Richard J. Jackson, M.D. and Ephraim Kahn, M.D. of the California State Department of Health Services.

All together, thirty-four (34) Sa-Lantic patients were identified during the initial search period for inclusion in the study. All were seen from 4-1-85 through 11-1-85. Charts were reviewed for the presence of an identification marker or tag and lab records were checked for individuals on which a cholinesterase test was drawn and sent for analysis. All but two cases were seen through outreach or at our Folsom area office. Nineteen cases (56%) had cholinesterases drawn but only eight questionnaires were completed by identified patients (23.5%). Thirty (all but four) or 88% had a home address listed in their medical or outreach record. Of those four, one was a Folsom area migrant farm laborer, two were Penns Grove area workers, and one was from Mexico (no further information was available). The availability of a home address for aiding both short-term and long-term follow-up was considered a very critical issue.

In addition to the study population on which the bulk of the data found in this report is based, a second larger population consisting of 417 Sa-Lantic patients on which information was drawn from outreach and offsite visits over the same time period as the sample population in 1985. These charts make up all of those patients seen in outreach or offiste visits, whether or not they were also seen inhouse at either of our permanent sites (Penns Grove/Hammonton). Because these workers were almost exclusively migrant famworkers they may, in part, overlap the sample popualtion, but do not do so completely. The information from these charts included age, home of origin, report of exposure to pesticides, farm of origin, type and duration of work and prevalence of significant symptomatology.. It does not, for obvious reasons, include data on cholinesterase levels or date identified which are peculiar to cases identified as having pesticide-related illness. From time to time, where it seems appropriate to examine the sample

population on specific factors in comparison to the larger population seen, this data is referred to in the study. It may be possible, at some later time, to match workers identified in the sample population with a similar worker (in terms of age, home origin, farm origin and related factors) to assess the long-term health effects from significant exposure to pesticides among farmworkers by following such workers health over a longer period of time.

As in previous years, this report is primarily a breakdown and tabulation of the available data. As much as possible, this data had been compiled and arranged so as to be as comparable to previous years as possible. Where this could not be done, the implications are discussed in the findings section. The categories into which the data has been broken down are:

County of Origin	Month Case Identified
Age	Reported Incidents of Exposure
Gender	Prevalence of Significant Symptomatology
Type and Duration of Work	Cholinesterase Levels
Homebase of Origin	

Following the tabulated data, a discussion of the findings and their comparability with the findings of previous studies, the limitations and values of the study and the plans for followup will be presented.

Tabulated Data

County of Origin

More than twenty farms in five counties are represented by the 1985 data. Sixty-two percent of our cases came from either Atlantic or Gloucester counties. Eighteen percent came from Cumberland County with the remaining twenty percent residing or working on farms in Salem, Burlington, Camden or an unidentified county. Since an analysis of patient origin by county has not yet been completed for Sa-Lantic's migrant farmworker patients seen during the summer of 1985, it is not clear whether or not this reflects the percentages of workers seen from these counties generally. It is suspected, however, that these numbers do reflect the overall proportions of workers seen from each county though our Folsom/Hammonton site. Differences between these figures and the proportions seen last year will be discussed later in the section comparing the results of this report with the survey results of the previous two years.

County of Origin	Number of Patients (Percentages)	
Atlantic	12	(35%)
Gloucester	9	(27%)
Cumberland	6	(18%)
Salem	3	(9%)
Camden	3	(9%)
Burlington	0	(0%)
Unknown	1	(2%)
TOTAL	34	(100%)

Age

Seventy-twopercent of participants in the study were adults in the age range 18-40 years. This is comparable to the percentages from the 1983-1984 surveys and probably reflects the makeup of the migrant farmworker population seen at Sa-Lantic facilities.

Age (in years)	Number of Patients (percentages)	
20 or under	7	(20.5%)
21 - 30	11	(32.0%)
31 - 40	7	(20.5%)
41 - 50	4	(12.0%)
over 50	3	(9.0%)
Unknown	2	(6.0%)
TOTAL	34	(100.0%)

Gender

Almost all the workers studied were male. Only one of the identified cases were female (3% of the total).

Type and Duration of Work

In addition to questions about the type of work they did on the farm, questions related to whether a worker lived year round in the area or not (Migrant/Seasonal Status) were asked. This year, the study population included a number of seasonal farmworkers. Two of these seasonal farm laborers reported spraying, mixing or transporting pesticides as part of their work; one migrant worker also reported this. All together, the percentage of workers among the case study population reporting such activities as part of their work was 9% (3 out of 34). In the 1984 study 9% of Sa-Lantic patients reported this activity as part of their work and 8% was the comparable figure in the 1983 study.

Status of Worker	Number of Persons (Percentages)
Migrant	25 (73.5%)
Seasonal	7 (20.5%)
Unknown	2 (6.0%)
TOTAL	34 (100.0%)

Because only eight individuals completed a questionnaire and recording of crop name in the medical record was rare, the listing of crops is small and not a good indication of any association between illness and crop type. It is included solely for the sake of consistency with the 1984 and 1983 survey results. In descending order by number of times mentioned by workers, the crops worked in are:

Crops Mentioned	Number of Times Mentioned
Parsley	3 times
Peaches	2 times
Apples	2 times
Blueberries	1 time each
Lettuce	
Cabbage	
Cucumbers	
Squash	
Eggplant	
Corn	
Flowers	
Broccoli	
Tomatoes	

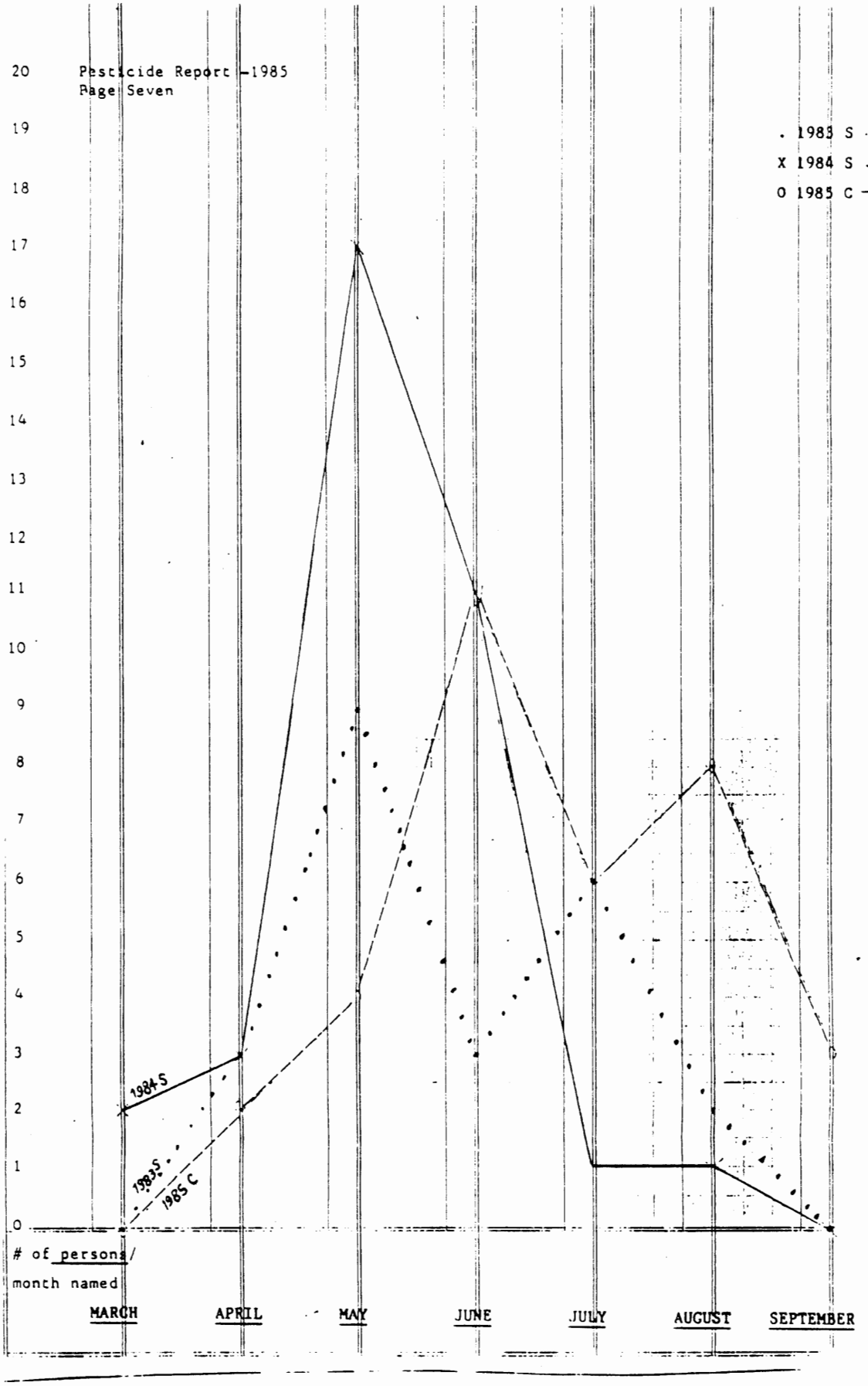
Month Case Identified/ Time of Arrival in New Jersey for Work

Month	Number of Patients	(Percentages)
March	0	(0%)
April	2	(6%)
May	4	(12%)
June	11	(32%)
July	6	(18%)
August	8	(23%)
September	3	(9%)
Unknown	0	(0%)
TOTAL	34	(100%)

Time of arrival in New Jersey for work was not asked of workers on a consistent basis this year. In lieu of this, I have included information on when by month, cases were identified. For many of these cases, exposures happened within one or two weeks of their seeking medical attention at Sa-Lantic. In some cases workers had been seen early in the season for other unrelated complaints.

It would be expected that these numbers would be comparable to the numbers collected in previous years for time of arrival for work in New Jersey, but skewed towards the middle of the season when our outreach efforts and programmatic efforts are at their peak and the bulk of workers have arrived and are working. It would also be expected to see more cases during those periods when spraying has recently occurred.

It should be noted that the month of June is far and away the most significant month for identification of pesticide related illness among Sa-Lantic patients. Whether this reflects the time of arrival for the majority of workers or the timing of heaviest pesticide application cannot be determined at this time. For a comparison of the data among the years, please see the graph presented on the following page.



COMPARISON: 1985 Month Case Identified to
1983 and 1984 survey results Time of Arrival for Work in New Jersey

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Homebase of Origin

Of our migrant farmworker cases all but five of them identified a town or area in Puerto Rico as their winter residence (85%). Only one person identiifed an area not in Puerto Rico, but in Mexico, with the other four responses being unrecorded or unknown. This is reflective of the large proportion of migrant farmworkers from the island who work in New Jersey during the growing season.

Based on outreach and offsite charts only, our percentages show the same percentage of migrant workers from the island overall as we have among the cases (considering the migrant worker representation only). Of those workers from the island, seventy percent (70%) of the total population seen offsite and sixty-eight percent (68%) of those migrant farmworkers from the sample case population were from one of sixteen communities in Puerto Rico. These communities in descending order (by numbers of patients seen from these communities) are: Patillas, Villalba, San German, Lares, San Sebastian, Ponce, Loiza, Yauco, Lajas, Aguasbuenas, Guayama, Utuado, Yabucoa, Camuy, Anasco and Moca. These communities are located throughout the island and idnicate that our migrant farmworker patient popualtion is not drawn exclusively from any one town, area or even region of Puerto Rico. A more comprehensive and complete study of the home origin of these patients is available upon request from Sa-Lantic.

Reported Incidents of Unnecessary Exposure to Pesticides: Spraying, Reentry Problems, Direct Contact with Pesticides

Every worker participating in a screening at an offsite facility for the first time this year was asked if they had been sprayed or worked in a field recently sprayed with pesticide. Based on a sample of 326 charts for which a response was recorded, 18 or 5.5% responded yes.* Among identified patients suspected as having pesticide poisoning or pesticide related illness, 17 out of a total of 34 (or 50%) associated their illness with their work. Out of these, four specifically mentioned being sprayed, four exclusively mentioned working in a field just following spraying or application of a pesticide. In total, eight or 23.5% developed pesticide related illnesses associated with either a spraying incident or with working in a recently sprayed field. This figure is lower but still similar to the 29% and 25% levels found among Sa-Lantic patients in the 1983 and 1984 surveys.

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* It must be noted that screenings are held at campsite and sample cases are usually brought into the clinic site and examined and questioned in privacy - something which cannot often be done at campsite. Therefore, it is to be expected that results from questions related to pesticide exposure, which could subject employers to fines, will often understate the real extent of the problem. Reprots, both from Sa-Lantic and elsewhere, continue to show that workers are reticent to speak out about this problem in any setting that does not adequately protect their privacy.

Prevalence of Significant Symptomatology

Our preliminary data on this question indicates that over eighty percent (80%) of the cases exhibited at least one or more of the symptoms on the checklist. In sixty-one percent (61%) of these cases, a rash or itching was the primary symptom of note. These symptoms were initially selected as those most often mentioned in the literature as signs and symptoms of pesticide-related illness, particularly for low-level exposures. The number of times each problem was checked or noted is printed to the left of each symptom.

10 headache	4 stomach cramps	23 skin rash, itching
2 weakness	1 diarrhea	11 watery, swollen, irritated eyes or blurred vision **
6 dizziness	0 a lot of saliva	
8 nausea, vomiting	0 heavy sweating	3 muscle twitching or tremors
8 pains in the chest (palpitations)	2 shortness of breath	3 cough with phlegm
3 tiredness	2 loss of appetite	1 nervousness
2 sore throat*	1 sleeplessness	0 unconsciousness
0 weight loss	0 thirstiness*	

Fifteen of these cases (44%) had three or more symptoms associated with a suspected pesticide related illness; ten (29%) had more than three.

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* These symptoms were cited by workers who had reported a pesticide exposure incident which resulted in a number of symptoms. Neither is usually considered a symptom of mild to moderate pesticide poisoning to my knowledge.

** All eye problems related to pesticide poisoning have been lumped together here, for consistency with the 1984 survey presentation. Since many of these workers were seen at a permanent center for a thorough physical exam the types of eye problems could be differentiated and are separately listed on the comparison sheet on page 11 of this report.

Prevalence of Significant Symptomatology (Continued from the previous page)

In comparison with the data from the study case population, the following data emerged regarding the prevalence of significant symptomatology from a review of charts from camps and other offsite facilities where we had seen migrant farm-worker patients during the summer of 1985:

22 headache	13 stomach cramps	30 skin rash, itching
8 weakness *	NR diarrhea	37 watery, swollen, irritated eyes or blurred vision
10 dizziness	NR a lot of saliva	
4 nausea, vomiting	NR heavy sweating	NR muscle twitching or tremors
11 pains in the chest (palpitations)	NR shortness of breath	19 cough with phlegm
2 tiredness *	NR loss of appetite	NR nervousness
NR sore throat	NR sleeplessness	1 unconsciousness*
NR weight loss	NR thirstiness	

Almost five percent (4.8%) of these workers had three or more symptoms associated with pesticide related illness - considering both symptoms checked by the worker or an assisting outreach worker from our office and symptoms reported by the patients verbally or noted by the provider upon examination.** These latter two areas, designated as **symptoms noted**, were obtained directly from the medical record while the former, designated as **symptoms checked**, was gleaned from the registration form (see attachment B). Almost thirty percent (28.8%) mentioned or noted one or more symptoms. Most mentioned: rashes and itching, blurred vision and other eye irritations, headache and cough. A comparison of these results and the results from the case study population with the findings of previous survey results can be found later in this report.

* **These figures are approximates only since no actual breakdown was completed.**

** This percentage is very similar to the percentage of workers who reported unnecessary exposure, although no correlation between those cases reporting such exposure and those noting three or more symptoms has been attempted.

Cholinesterase Levels

Date Seen	Red Cell Cholinesterase	Serum Cholinesterase
5-10	4613	—
5-21	3906	—
5-31	—	3597
5-31	—	2268
6-14	—	3816
6-14	—	2268
6-14	Blood drawn but sample lost and results never came in	
7-1	3665	—
7-8	—	1897
7-16	Blood drawn but sample lost and results never came in	
7-16/also seen 7-30 & 8-9	— first sample hemolyzed	3342
8-8	—	2686
8-13	—	2908
8-15	—	2603
8-15	—	2486
8-14	—	2580
8-28	—	3120
9-13	—	2170
9-24	—	2451
4-16	3096	—
8-15	—	2885
5-21	4463	3046
5-21	4604	2444
5-21	4000	2156
5-21	4160	3301
5-13	3309	3206
6-27		2891
6-20		1211

Cholinesterase Levels (Continued from previous page)

Of twenty-four identified cases of suspected pesticide related illness, twenty three (67.6%) had a cholinesterase drawn for testing. Two of these were subsequently lost by the referral lab and one hemolyzed but a repeat was taken at a later time. Four workers had red cell cholinesterases ordered and the remaining had serum tested, i.e. pseudo-cholinesterase. Red cell cholinesterase was ordered in place of serum if the worker's reported exposure had occurred more than two weeks before the date at which he arrived for treatment and testing at a Sa-Lantic site. The total sample number with cholinesterase results of any type was twenty-one or 61.8% of the case study participants. Two of the workers whose blood was drawn early in the season as a baseline were involved in a later incident involving alleged direct spraying. These two workers were included in the case study. However, three other workers whose blood was similarly drawn were not seen at Sa-Lantic at any other time related to any particular exposure incident, and therefore, were not included in the case study population, although the results of their cholinesterase tests have been listed on the previous table.

The impression reached from chart notes and discussions with workers is that, in most cases, farmworkers on whom cholinesterase test were ordered were not seen within forty-eight hours of the reported or suspected exposure incident, but from two days to two years (in one case) later. Almost half (48.8%) of the workers being seen for symptoms stemming from a work incident potentially involving pesticides gave the time of the incident as less than two weeks prior to their visit.

Two workers had results below normal range. One was the sole female participant in the case study and the other had a depressed level of 1211, about 36% below the lowest point of normal range (based on a single test).

The literature has often noted the importance of baseline or return-to-normal data in properly evaluating cholinesterase levels. Unfortunately, many of the workers in this case study were not tagged until late in the season when they could no longer be reached. Continuing efforts are underway to improve the recording of critical information, such as patient's home address and full identification, as well as the numbers signing a release for Sa-Lantic to share information with health centers in their homebase area. Follow-up by letter is in process to inform and encourage those workers on whom we have an address to contact us or another nearby health provider for a repeat cholinesterase in January or February, before returning to New Jersey or beginning to work another season in the fields. It is hoped that data can be obtained in this way, for at least some of the workers who were tested in the summer of 1985, in order to better evaluate the results of the cholinesterase testing for each individual. However, at present, given the initial small sample coupled with the variability in the type and the timing of the cholinesterase tests, any conclusions drawn from this data would be premature and speculative.

Special Section: A Comparison of Selected Health Problems

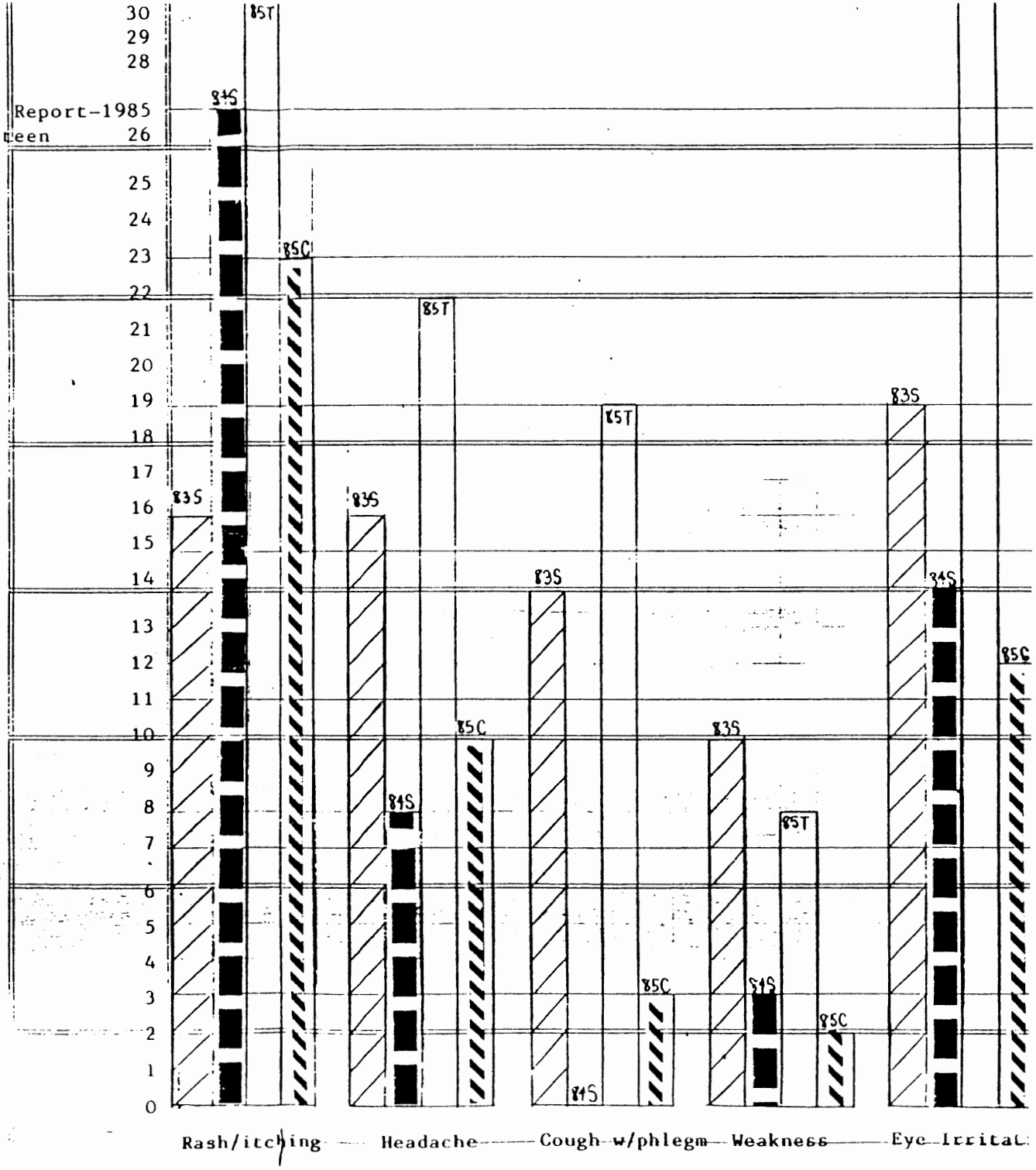
A Comparison of Selected Health Problems Noted or Checked by Farmworker Patients by Year and Designation, as appropriate

Health Problem	1985 C*	1985 T**	1984 S***	1983 S****
Skin rash, Itching	23	30	27	16
Headache	10	22	8	16
Cough with phlegm	3	19	0	14
Weakness, Unconsciousness	2	not recorded separately	3	10
Tiredness, Fatigue	3	9	3	14
Blurred Vision	7	24		8
Watery Eyes	4	14	not recorded separately	12
Irritated or Itchy eyes	7	13	14	13
Chest Pains or Palpitations	8	11	2	6
Nausea, Vomiting	8	4	5	6
Dizziness	6	10	4	2
Abdominal Cramps or Pains	4	13	1	4

In comparing the 1985 results with the results of pevious years' surveys, more workers checked rashes and eye irritations while symptoms such as headache and couth with phlegm were more often noted by either the worker or the examining physician when a more detailed and more private interview of the patients was taken/given. This may, in fact, partially explain the variability in the actual numbers associated with the prevalence of certain symptoms among Sa-Lantic patients when comparing the results over different groups and over several previous years.

Sa-Lantic patients included in the 1983 survey were carefully and rather thoroughly interviewed by the author of the survey, Ms. Valerie Wilk, as privately as was possible and often in conjunction with a thorough physical exam. In the 1984 survey however, Sa-Lantic patients were more often than not asked to fill out a pesticide questionnaire, independently from the interviewer and were only rarely interviewed privately at any length. For the 1985 study population, patients were again included based on examinations and physician interviews at one of the clinic sites, where privacy is not a problem. The 1985 general review of charts however, includes many responses from workers interviewed briefly prior to examination at the campsite where both time and privacy are in short supply and the emphasis is on triage (identification of potentially serious illness) and referral rather than information gathering related to pesticide exposure. Therefore, one might expect results from the 1983 survey and the 1985 study to be similar to each other and the 1984 survey and the 1985 general population statistics to be more alike in this regard (as the comparison above shows).

* 1985 C figures are based on 34 cases identified as having suspected pesticide-related illness in 1985.
** 1985 T figures are based on 417 charts reviewed from all offsite visits in 1985.
*** 1984 figures are based on 68 survey participants in 1984.
**** 1983 figures are based on 54 survey participants in 1983.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4
3
2
1
0
Rash/itching
Headache
Cough w/phlegm
Weakness
Eye Irritat

Discussion

General Findings and Comments

The major finding of this report is that incidents of pesticide exposure among farmworkers continue to promote adverse health conditions in these workers in many cases, the total extent of which is still unknown. Sa-Lantic identified thirty-four suspected cases of pesticide related illness over the summer of 1985, comparable to the thirty-nine cases reported by Sa-Lantic in 1984* and the twenty-four in the 1983 study.** Therefore, the problem of eliminting illness arising from unnecessary and preventable pesticide exposure among occupationally exposed workers is not yet resolved. When a review of farmworker charts from the 1985 season is completed, reflecting both inhouse and offsite visits, an even clearer view of the percentage of pesticide-related illness within our entire farmworker patient population may emerge.

Last year, a review of all currently active migrant farmworker charts indicated that possible pesticide related illnesses, particularly irritational dermatitis, accounted for thirteen percent (13%) of all illness among Sa-Lantic farmworker patients and was our fourth most commonly recorded diagnosis (just below Upper Resporatory Infections, Dental Problems, and Musculo-Skeletal complaints -not including Lumbar/Sacral Strains/Sprains/Torsion).

Many workers were concerned about losing their jobs if they refused to work in fields still wet from the spray of a pesticide or in close vicinity to a field receiving a pesticide application. Some are even afraid to participate in a survey or to make a complaint. In a number of the cases outlined in this report, workers specifically requested that all information detailing the incident of which they were a part be kept confidential and that no one be sent to investigate. Since the reporting of such incidents remains voluntary in New Jersey, patient privacy, in such cases, must take precedence, hampering efforts at documentation of the problem. Information remains for the most part, unavailable, since neither workers nor medical personnel have direct access to spray records. Therefore, we still do not know what has been sprayed on plants with which workers have been in contact and cannot determine whether adequate reentry time has passed or whether appropriate clothing has been issued.

New regulation in effect as of the fall of 1985 will require the name of the pesticide to be available to the worker through either a posted sign at the entry to the field in question (for any pesticide requiring a seven day reentry period) or at a central location at the campsite, such as on a bulletin board (for all pesticides with twenty-four hour or longer reentry period). These regulations also do not allow reentry for any pesticide used in agriculture (except those incorporated in the soil) until droplets of spray have dried or the dust has settled following application. Future studies will, hopefully, help to evaluate the effectiveness and usefulness of these regulations in aiding to prevent, identify, diagnose and treat cases of pesticide related illness.

* These thirty-nine cases includes individuals who made up three groups of workers who made complaints from three different farms, irrespective of whether they were identified separately by name or situation in 1984 reports.

** Based on a 1985 review of the old records on hand on which the 1983 survey was developed

The overall problem of unnecessary exposure among farmworkers is exacerbated by insufficient attention to many of the pivotal and contributory facotrs and the ever present problems of worker inaccessibility to mainstream services in the communities where they reside and work. These include:

1. the absence of legislation which protects farmworkers from losing their jobs if they refuse to work under unsafe and unhealthful conditions in the fields, particularly as this relates to exposure to pesticides, or if they lodge a complaint about pesticide use on the farm where they live or work.

2. the absence of reentry standards based on solid research into the toxicology and adverse health effects of long-term, chronic exposure to multiple chemicals by farmworkers.

3. the lack of information provided to farmworkers about the specific chemicals which have been sprayed or otherwise used on or around the plants with which they work.

4. the lack of sufficient washing and laundry facilities in the camps as well as the inadequate water resources for washing and drinking in the fields.

Other problems mentioned in previous reports such as

- the general lack of knowledge among farmworkers (of even the most basic kind) about proper pesticide usage and protections and their inability to communicate these concerns because of cultural, class, linguistic, geographic and communicative isolation

- the lack of educational efforts aimed at the farmworker which might improve their awareness of the hazards of pesticide exposure and

- the low percentage of those who use adequate protective clothing while working

have seen some improvement with the addition of both an enforcement agent and a (second) clerical staff member to the Bureau of Pesticide Control (the main agency responsible for the oversight and monitoring of pesticide use in New Jersey). Both of these new staff members are bilingual in Spanish and are capable of communicating with the farmworkers as well as with the farmers. The enforcement specialist has been assigned to oversee the agricultural sector use of pesticides and to contribute to efforts at training and educating workers as well as to follow up on complaints.

Limitations of Methodology and Applicability of the Study to a Larger Population

Sa-Lantic is a health services program with two permanent sites whose major function is to provide primary health care services and appropriate referral to rural residents and farmworkers in our target areas. As such, we have neither the expertise nor the money, staffing or time to plan and implement a thorough and exhaustive survey of the pesticide exposure problem in southern New Jersey at the present time.

The results presented in this report are valid for the purposes for which the study was begun and supports the findings of Sa-Lantic's previous efforts in this area as well as larger studies done in Florida and California under other auspices. The author and Sa-Lantic recognize that, at least technically, the applicability of any case study to farmworkers in general or to the farmworkers in southern New Jersey as a whole is severely limited. However, because this data is based on actual cases from an overall farmworker patient population of almost 800 users, the author is confident that the data is extremely solid and worthy of note.

The stability of the number of cases uncovered by Sa-Lantic, after three years, speaks well for the overall Sa-Lantic effort. Still, we know we are limited by the number of workers we can see over a season, given our current resources, and by the time we can spend with each worker so as to obtain the most comprehensive information possible under the best possible conditions. It is sincerely hoped that a state agency, non-profit foundation or similar source will become involved to help delineate the true extent and nature of the problem of pesticide related illness in farmworkers.

Values and Uses of the 1985 Case Study

The decision to move into a slightly different framework for this year's pesticide project was prompted by several ongoing concerns. The first involves the underlying motivation for the survey done in 1983 and 1984 and the accomplishment of the initial goals served by the survey. The second is the pressures of staff, monetary and time limitations in expanding the survey in ways to make it a more technically credible study of the occupational experiences of southern New Jersey farmworkers with pesticide exposure. We have not been able to alleviate these pressures at the current time. The final, and most important, reason was the necessity to better identify and follow-through cases of suspected pesticide-related illness in order to meet our primary mandate of bringing quality health care to area farmworkers. It has been clear almost from the beginning that a number of problems associated with mitigating pesticide related illness in the field are greatly dependent on several factors - not all of which are under Sa-Lantic's control. Although we are actively seeking to influence and change many aspects of the current situation which our previous work has led as to believe are critical to successfully alleviating the problem of unnecessary pesticide exposure of farmworkers, we are anxious and determined to move ahead in those areas in which our own, sole, efforts can make an appreciable impact.

One of these areas is in proper followup care and long-term monitoring of patients who come to us with significant exposures. Since the majority of these patients have homes where they can be reached during the winter - it was imperative to alert staff to obtain these addresses. Our efforts in this area have revealed that the majority of these patients with known permanent addresses, live in Puerto Rico, so we have attempted and will redouble efforts to interest the clincial services and public health officials in Puerto Rico to join us in obtaining baseline or followup measurements of cholinesterase levels and in providing long-term monitoring of the health of these individuals.

Other efforts have been made such as providing pesticide education seminars to the emergency room staffs of area community hosptials and joining with new staff at the Department of Environmental Protection's Bureau of Pesticide Control in providing increasing educational opportunities for area farmers and farmworkers to learn about self-protection measures and the hazards of pesticide exposure.

Even so, the size of the required effort is onerous for Sa-Lantic because of the recent cutbacks in our funding. We continue because our past efforts have made us all too aware of the shocking extent of this problem which, previous to our inital survey effort, was almost completely discounted and ignored by everyone in the state of New Jersey. We have been encouraged by the progress made but we know there is still much to be done if we are to root out the sources of this problem. We recognize the gaping wound in our current system of protecting our residents and workers against unnecessary pesticide exposure. We again encourage and challenge the responsible individuals and agencies to meet their responsibilities in seeking a workable solution to this important health problem in our state.

Recommendations

1. **Expanded efforts to document the extent of the pesticide exposure problem in southern New Jersey.** This should include efforts to monitor the improvement of both actual conditions and overall awareness among both workers and farmers in relation to providing information about pesticide hazards, proper protective measures, the importance of immediate action if exposure is suspected or known and where to call for assistance. Sa-Lantic plans to meet this objective by pressing a three point action plan: first, to continue, institutionalize and improve, where needed, the pesticide program by maintaining an ongoing identification of cases; secondly, to seek out and work with others to locate funding for projects which can expand our understanding of the problem and lead us towards appropriate solutions; thirdly, to advocate for all necessary actions on the part of all responsible agencies in improving the current atmosphere and present attitudes which contribute to the continuation of the problem.

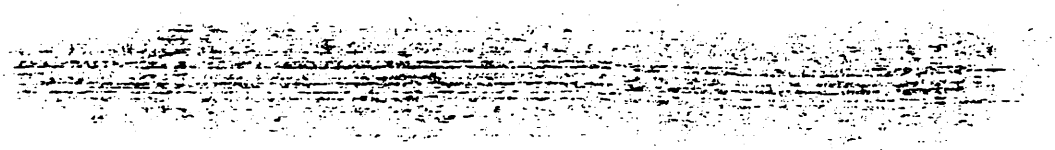
Recommendations (Continued from the previous page)

2. **Expanded efforts at education at all levels of society, both here and, wherever possible, in Puerto Rico.** Especially, to increase awareness of the potential hazard associate with improper and careless use of pesticide products, whether in the home or in the fields, with special continued efforts with farmworkers, health personnel of surrounding health facilities such as community hospitals and agency people responsible for the health and safety of farmworkers both here and in Puerto Rico.

3. **Continued support for improved law and regulation to better protect farmworker health.** Sa-Lantic will support, to the extent possible, all legislation and regulation which will improve the health of farmworkers in southern New Jersey and ameliorate health hazards on New Jersey farms.

4. **Attempt to influence the expansion of educational opportunities for farmers and their families on this important issue.** Pesticide exposure is an important issue for farmers and farm families as well as farmworkers. In addition, farmers and farm families often have an enormous impact and influence on the choices their workers make about exposure to pesticides as well as to other related health issues. Sa-Lantic will make a new effort to bring information about pesticide hazards to this important group.

Additional copies of this report and copies of the 1984 and 1983 survey reports are also available. These materials and other reports, fact sheets, resource guides, articles and books on pesticides and their health effects are available through Sa-Lantic Health Services, Inc., 879 12th St., Hammonton, NJ 08037 (609) 567-0200. Please contact Ms. Lynne Steinberg, Migrant Program Director or Mr. Neville Davis, Project Director.



TESTIMONY ON S3741

Presented before the

SENATE LABOR, INDUSTRY AND PROFESSIONS COMMITTEE

on

October 10, 1989

GIVEN BY:

Sharon A. Ainsworth
Associate Secretary
New Jersey Department of Agriculture

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I AM SHARON AINSWORTH, ASSOCIATE SECRETARY OF AGRICULTURE AND AM HERE TODAY TO PROVIDE COMMENT FOR THE STATE DEPARTMENT OF AGRICULTURE ON SENATE BILL 3741.

THIS LEGISLATION WOULD PLACE ADDITIONAL REGULATORY REQUIREMENTS ON PESTICIDE USERS, INCLUDING FARMERS. ALTHOUGH THIS PROPOSAL DOES NOT CONTAIN MANY OF THE SPECIFIC MANDATES FOUND IN EARLIER VERSIONS OF THE BILL, IT UNFORTUNATELY MAINTAINS THE BASIC PREMISE THAT THE BEST WAY TO ADDRESS THE COMPLEX ISSUE OF INSECT, DISEASE AND WEED CONTROL IN AGRICULTURAL PRODUCTION IS TO FURTHER REGULATE THE USE OF PESTICIDES. THE DEPARTMENT BELIEVES THIS APPROACH IS COUNTERPRODUCTIVE AND WOULD LIKE TO OFFER THE SPONSOR AN ALTERNATIVE.

THIS ALTERNATIVE IS A PROACTIVE APPROACH THAT PROVIDES ADDITIONAL SUPPORT FOR PROGRAMS WHICH ARE DESIGNED TO REDUCE OR ELIMINATE PESTICIDE USE IN CROP PRODUCTION AND PROGRAMS WHICH EDUCATE PESTICIDE USERS. THESE PROGRAMS CURRENTLY EXIST IN NEW JERSEY AND NEED TO BE RECOGNIZED BY THIS COMMITTEE. LET ME STRESS AGAIN THAT THE DEPARTMENT STRONGLY BELIEVES THE BEST APPROACH TO THIS COMPLEX ISSUE IS RESEARCH INTO ALTERNATIVES AND EDUCATION OF PESTICIDE USERS - NOT AN INCREASE TO THE REGULATORY MAZE.

FIRST, I WOULD LIKE TO DISCUSS EXISTING STATE PROGRAMS WHICH SEEK TO ELIMINATE OR REDUCE PESTICIDE USE AND OTHER FORMS OF "ALTERNATIVE AGRICULTURE". THE COMMITTEE MAY BE AWARE OF A RECENTLY RELEASED REPORT FROM THE NATIONAL ACADEMY OF SCIENCES WHICH USES THIS TERM.

125X

FINALLY, THE DEPARTMENT DURING THE PAST YEAR HAS PROVIDED ASSISTANCE TO THE AGRICULTURAL SECTOR INTERESTED IN ORGANIC FARMING. WORKING WITH THE NEW JERSEY CHAPTER OF THE NATURAL ORGANIC FARMERS ASSOCIATION, DEPARTMENT PERSONNEL HAVE SERVED ON THE CHAPTER'S CERTIFICATION BOARD AND ASSISTED DURING FARM INSPECTIONS FOR CERTIFICATION.

THE REASON FOR PRESENTING THIS DIVERSE INFORMATION TO THE COMMITTEE IS TWO FOLD: FIRST, NEW JERSEY IS MOVING IN THE DIRECTION OF IMPROVED CROP PRODUCTION SYSTEMS AND SECOND, INCREASING THE REGULATORY BURDEN OF PESTICIDE USE WILL NOT ELIMINATE THE NEED TO CONTROL DESTRUCTIVE PESTS IN CROP PRODUCTION. I HOPE THE COMMITTEE WILL CONSIDER THESE POINTS PRIOR TO TAKING ACTION ON THE BILL BEFORE YOU.

I WOULD NOW LIKE TO COMMENT ON SOME OF THE SPECIFIC PROPOSALS OF THIS LEGISLATION.

THE BILL HAS A NUMBER OF NEW PROVISIONS DEALING WITH FARMWORKERS. IN SOME CASES, THESE PROVISIONS DO NOT TAKE INTO CONSIDERATION WHAT CURRENTLY EXISTS IN THE DEP REGULATIONS. FOR EXAMPLE, THESE REGULATIONS REQUIRE THAT WORKERS NOT ENTER A FIELD UNTIL THE REENTRY TIME HAS ELAPSED. THE CURRENT DEP REGULATIONS PROHIBIT WORKER REENTRY UNDER THIS CIRCUMSTANCE. WORKERS ARE PROVIDED WITH THIS INFORMATION BY THE POSTING OF A CENTRALIZED MAP WHICH CLEARLY INDICATES WHICH FIELDS SHOULD NOT BE ENTERED.

THE DEPARTMENT BELIEVES NEW REGULATIONS SHOULD BE BASED ON AN IDENTIFIED PROBLEM. THE CURRENT PROGRAM WHICH SEEKS TO LIMIT NON-TARGET EXPOSURE THROUGH THE TRAINING OF APPLICATORS IS PREFERABLE AND SHOULD BE CONTINUED.

SECOND, THE ESTABLISHMENT OF MANDATORY PRIOR NOTIFICATION COULD RETURN FARMERS TO A SPRAY SCHEDULE APPROACH TO PESTICIDE USE. FARMERS NOW HAVE THE FLEXIBILITY TO SPRAY WHEN NEEDED AND WHEN THE CONDITIONS ARE RIGHT -- NOT JUST WHEN THE SCHEDULED NOTICE MAY HAVE INDICATED.

IN SHORT, THE DEPARTMENT SUPPORTS THE TRAINING AND EDUCATION OF APPLICATORS AND BELIEVES THIS IS THE MOST EFFECTIVE WAY TO PREVENT EXPOSURE TO AREAS AND INDIVIDUALS OUTSIDE THE SPRAY TARGET AREA.

THE LEGISLATION ALSO PROPOSES A BAN ON THE AERIAL APPLICATION OF BROAD SPECTRUM PESTICIDES EXCEPT FOR APPLICATIONS TO LANDS NOT ACTIVELY DEVOTED TO AGRICULTURAL OR HORTICULTURAL USE. THE DEPARTMENT AGREES WITH THE EXEMPTION OF THESE LANDS. HOWEVER, THE PROPOSAL REQUIRES AN EMERGENCY EXEMPTION PROCEDURE IF THERE IS AN AGRICULTURAL PEST EMERGENCY ON ANY OTHER LANDS.

THE DEPARTMENT IS CONCERNED THAT THIS WILL HAMPER OUR ABILITY TO QUARANTINE, ERADICATE AND CONTROL POTENTIALLY DAMAGING PESTS AND PLANT DISEASES IN A TIMELY MANNER. THE DEPARTMENT QUESTIONS THE NEED FOR BEING INCLUDED UNDER THIS AERIAL APPLICATION BAN.

IN ADDITION, PRIVATE LANDOWNERS WHO SEEK TO PROTECT THEIR WOODLOTS FROM DESTRUCTIVE PESTS BY AERIAL APPLICATION WILL HAVE THEIR OPTIONS SEVERELY RESTRICTED. THIS STRATEGY DOES NOT TAKE INTO CONSIDERATION THAT AERIAL APPLICATION USES LESS ACTIVE INGREDIENT PER ACRE THAN COMPARABLE GROUND APPLICATIONS.

FINALLY, THE DEPARTMENT WOULD LIKE TO COMMENT ON THE PROPOSED CHANGES TO THE PESTICIDE CONTROL COUNCIL. THE DEPARTMENT BELIEVES THE COUNCIL SHOULD CONTINUE IN THEIR CURRENT ROLE AS ADVISORS TO THE COMMISSIONER ONLY. IF THE MEMBERSHIP IS EXPANDED, IT SHOULD BE BALANCED. THIS SHOULD INCLUDE AN INDIVIDUAL WITH TRAINING IN WILDLIFE BIOLOGY AND A REPRESENTATIVE OF A PESTICIDE MANUFACTURER.

IN CONCLUSION, THE DEPARTMENT WOULD ENCOURAGE THE COMMITTEE TO CAREFULLY EVALUATE THE IMPACT THIS LEGISLATION WILL HAVE ON THE AGRICULTURAL INDUSTRY. AS WAS POINTED OUT EARLIER, THE DEPARTMENT STRONGLY BELIEVES THAT RESEARCH INTO ALTERNATIVE AGRICULTURAL SYSTEMS AND EDUCATION OF PESTICIDE USERS IS THE BEST APPROACH - NOT AN INCREASE IN THE REGULATORY MAZE CURRENTLY FACING FARMERS.

I APPRECIATE THE OPPORTUNITY TO PROVIDE COMMENT ON THIS LEGISLATION. THANK YOU FOR GIVING CONSIDERATION TO SUGGESTS OF THE DEPARTMENT OF AGRICULTURE.

NEW JERSEY ENVIRONMENTAL FEDERATION

46 Bayard Street 3rd Floor New Brunswick, NJ 08901
201-846-4224

Testimony before the Senate Labor, Industry and Professions Committee October 10, 1989 **in support of** S-3741, Amendments to the Pesticide Control Act of 1971.

Committee members and Senator Lesniak, thank you for holding this public hearing on a very important piece of legislation, and Senator Lesniak, thank you for encouraging citizen input into the legislative process which culminated in this bill, which is actually a re-introduction of the Lesniak bill of 1983, S-1342. The proposal on the table has been streamlined, updated, and we feel that many of the objections to the 1983 version have been overcome.

My name is Jane Nogaki and I represent the New Jersey Environmental Federation, a broad based coalition of 45 citizen, labor, and environmental groups, and 60,000 individual members who are spoken to at their door by our professional canvass. The NJEF has made the pesticide safety issue one of its major campaigns in the past four years because of the concerns of our individual and group members regarding this issue. As a coalition we have worked to get better pesticide notification regulations, tried to educate the public about safer alternatives through our "Home Safe Home" exhibit and brochures, spoken at environmental conferences about the hazards of pesticides and alternative approaches, and supported legislation to get more funding for the beneficial insect rearing laboratory in an attempt to promote non-toxic alternatives to pest control. Twice the Federation has worked within the state budget process to get appropriation resolutions for the Bureau of Pesticide Control, only to see those funding levels cut in the 1989 budget. We have supported the Department of Agriculture and the Department of Environmental Protection in their use of Bacillus Thuringiensis, a selective biological insecticide, for gypsy moth control on residential and state lands. We worked with Monmouth County groups such as Clean Ocean Action and NJ Shore Audubon Society to get the Monmouth County Board of Freeholders to pass a resolution in support of B.T. as the "least toxic alternative" control for gypsy moth in the county aerial spraying program, and with the strong leadership of then Freeholder John D'Amico, that resolution passed unanimously and carbaryl (Sevin) is no longer sprayed aerially in Monmouth County.

We feel that a better awareness on the part of the pesticide industry and the public exists today than five years ago. In a February 1987 EPA report, entitled "Unfinished Business," the EPA ranked pesticides in food as one of the nation's most serious health and environmental problems. the EPA's disclosure in 1987 of groundwater contamination by twenty pesticides in at least twenty four states, one of which is New Jersey, has led to several federal legislative initiatives for groundwater protection, which are heavily opposed by the national farm bureau and agricultureal chemicals lobby. Because of the heightened awareness, we believe that the legislative agenda as proposed in S3741 is a necessity if citizens are to have confidence in government's ability to control pesticide use safely. Concerns about pesticides in food, ground and surface water, and in our homes, lawns, and workplaces can only be addressed through a strong and technically competent regulatory authority, and that authority, the NJDEP, is currently hamstrung in its ability to adequately regulate pesticides because of inadequate, sporadic funding and some unclear areas of authority. In addition, authority invested by this bill in the NJDept. of Health will give a sound basis for making judgements about which, if any, pesticides, are causing health problems to applicators or the public at large. Finally, the bill gives citizens the right to know what pesticides are being used in their environment and workplace, and to take civil action when the governmental agencies have not carried out their mandate. This is a very important component of the bill and a means to insure that environmental laws will be enforced. There are precendents for these rights in the Clean Water Act and the Environmental Rights Act.

The New Jersey Environmental Federation is in **strong support of every measure outlined in S3741.** Constituent members of our coalition will be testifying on different parts of the bill today, and in the interest of avoiding repetition I will focus on The Pesticide Control Council, The Technical Review Council, and the issue of fines and penalties.

PESTICIDE CONTROL COUNCIL:

The PCC under current law is composed of nine members appointed by the Governor: three public members (undesignated), three representing DOA, DOH, and Cook College, and three members designated as an ecologist, farmer, and toxicologist. The purpose of the PCC is to advise the DEP Commissioner on matters relating to the improvement of pesticide control programs, to review regulations, and to hold periodic public hearings concerning the use and application of pesticides.

The proposed make-up of the Council broadens it to include more representation of interested parties as well as more technical support. The recommendations for each position comes from an academic or organizational body of that kind of individual, thus removing some of the politics out of the recommending process. Thus the applicator representative will be recommended by the pest control association, and the environmental group representative will be recommended by environmental groups. The proposed make-up of the PCC is modelled after the NJ Right-to-Know Advisory Council, which is thought by most to be a representational group of all interested parties which functions well.

By expanding the PCC, more points of view will be represented on the Council, and hopefully a broader base of expertise. Speaking from personal experience as a public member of the PCC, I have been concerned by the political nature of the appointment process to the Council in the past, and by the imbalance of interests represented on it, with applicator and agriculture interests being well represented and consumer/health/worker interests being underrepresented. This situation will be corrected in the proposed legislation by specifically adding to the Council (in addition to the members of the DOH, DOA, Cook College, the ecologist, farmer and toxicologist already on the Council) an organic farmer, a farmworker, a person with integrated pest management experience,a representative of an environmental group, a representative of a public interest group, a pesticide applicator, a medical doctor trained in occupational safety and health, a groundwater hydrologist. By requiring the PCC to submit an annual report to the Governor and Legislature regarding the PCC's recommendations for legislative or administrative action, the PCC will be more accountable for executing its responsibilities. The PCC will also serve as a vehicle to receive technical recommendations from the Pesticide Technical Advisory Committee and funnel those recommendations to the Governor, Legislature, and the public. It is important for the public to be able to learn of the recommendations of the Technical Advisory Committee and to provide comment on them, and the appropriate vehicle for doing this should be the PCC meetings.(Note. these comments reflect my personal views and are not be be construed as the position of the present PCC)

THE PESTICIDE TECHNICAL ADVISORY COMMITTEE

NJDEP has long recognized its need for technical support in reviewing the use of pesticides and developing a priority scheme for overseeing the progress of pesticide assessments and research. The PTAC would provide such support for the Department, and we support the creation of this committee. We have been frustrated in the past by DEP's and DOH's inability to respond to a "pesticide crisis" such as the ones surrounding ALAR, CHLORDANE and ALACHOR and TEMIK. In fact, DOH has acted proactively on a pesticide only once, in the case of EDB in 1985, restricting its food tolerance to 0 ppm.

NJEF has petitioned the DOH AND DEP to take action independent of the EPA on the four above mentioned pesticides several times to no avail. Lack of resources /technical support have been cited as the reasons for the inaction. Other states, Massachusets, Maine, New York,have acted independently to ban one or all of the above mentioned pesticides, while NJ has relied on the EPA for guidance, a reactionary posture we would like to see changed in the interest of all our citizens but especially for the most vulnerable, our children, our elderly, our chemically sensitive.

The reporting of pesticide exposure incidents will directly tie into the effectiveness of the PTAC in directing its energies to the problems that are specific to NJ. With increased awareness of the recognition and treatment of pesticide exposure by physicians and emergency responders, and a system in place for recording exposure incidents, a more accurate picture of problems related to pesticide use can be cast. Eight states already have mandatory reporting of pesticide incidents by physicians (CALIFORNIA, IOWA, FLORIDA, MISSISSIPPI,NEW YORK, OKLAHOMA, OREGON,WISCONSIN)

RETURN OF FINES, UPGRADE OF PENALTIES

The New Jersey Environmental Federation strongly supports the return of fines into an environmental services fund for support of pesticide control programs. The current trend towards making programs self supporting through fees and fines from the regulated industry coming back into the department for enforcement and education is a concept which is most appropriate. Most important to the continued operation of a good enforcement program is a stable source of funding. It would be our goal for the Pesticide Control Element that sufficient funding be available to insure a prompt response to the 1000 or so pesticide complaints registered per year, and that each of the 5,000 farms and 5,000 pesticide businesses in NJ could expect an annual inspection visit from NJDEP.

Additionaly, we strongly support the raising of the maximum penalty fee from $3000 per violation per day to $25,000. Please note that the maximum penalty for violations of the Clean Water Act is $50,000 per day per violation. It is imperative that fines be stiff enough to act as a deterrent; at present they are low enough to be figured into the"cost of doing business."

IN CONCLUSION, we support all the proposed items in S-3741 and think that the gaps in farmworker right-to-know and community-right-to-know about pesticide applications and precautions for safety need to be closed now. In addition to this bill, we support intitiatives that would promote increased use of Integrated Pest Management, a shift to sustainable agriculture, and the certfication of organic food in New Jersey. Pesticide alternatives are available and they have been shown to work, but they require education and a shift in policy by the state Department of Agriculture , Cook College and the Extension Service of Rutgers University. According to the recent report of the National Academy of Science entitled "Alternative Agriculture", "Well-managed alternative farms use less synthetic chemical fertilizers, pesticides and antibiotics without necessarily decreasing, and in some cases, increasing per-acre crop yields and the productivity of livestock systems." (NY TIMES 9/8/89)

Jane Nogaki, Chairman
New Jersey Environmental Federation

COURIER-POST, Friday, September 29, 1989

State calls radon risk high

...ued from Page 1A

...adon is an odorless and colorless radioactive gas ...ed by the breakdown of naturally occurring ura... It is found everywhere, but is most dangerous ...t seeps into a building through cracks in walls ...loors and collects in basements and other ...s.

...hough a growing body of documentation points ...he risks of radon exposure, Daggett said only ...t 10 percent of New Jersey residents have tested ...homes for radon. That rate only increases to 25 ...ent in high-risk areas of northwestern New ...ey.

"We know that radon can cause lung cancer and we ...w that houses can be rid of dangerous levels of ...on," Daggett said. "It's imperative that the public ...come its apparent apathy about the radon prob... and perform inexpensive tests to find if it is in ...homes."

...ckert said simple test kits can cost as little as ...and provide peace of mind if a low level of radon is ...ted. If an unacceptable level is found — greater ...n four picocuries per liter — then steps can be ...n to ventilate the radon or seal it out.

...When it comes to testing, however, the EPA ...nowledges that screening tests generally overesti... annual average radon levels. Additional testing ...be necessary to confirm a suspected level.

...he screening tests are made of the air at the lowest ... — the basement floor, most often — of a sealed house, where the heavier-than-air radon gas tends to puddle. Some environmental scientists have estimated that such screening readings represent two to five times the actual exposure of residents to radon, but no scientific studies have yet been published relating radon test results to human exposure. The first such study began this past winter and was scheduled for publication in 1991.

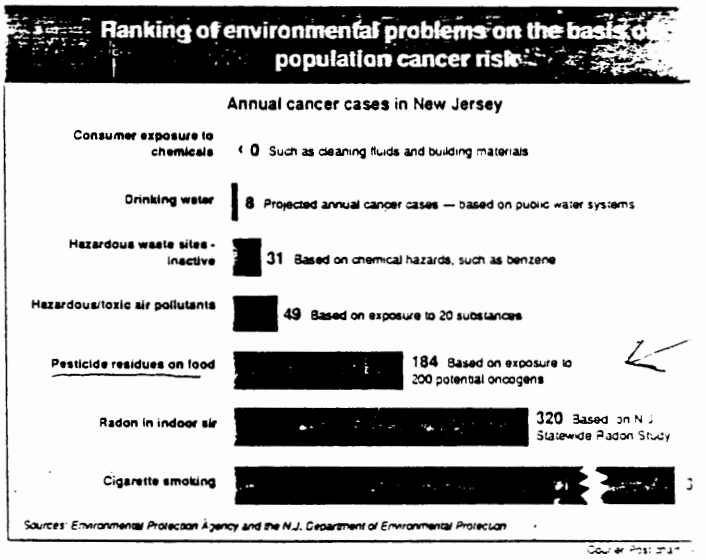
The cost of eliminating a radon problem, about $1,200 on the average, costs about the same as ridding a home of termites, Daggett said. He added that testing for radon, like termites, is often required when selling a home.

The $1.3 million study of 5,727 homes showed an average radon level of 5.2 picocuries per liter, with 33 percent of the homes above the federal limit.

The worst-affected area of the state was western Warren and Sussex counties, where 57 percent of the homes tested had unacceptable radon levels at an average of 7.6 picocuries.

In contrast, homes tested in the most western thirds of Burlington, Camden and Gloucester counties along the Delaware River averaged 2.4 picocuries, with only 14 percent of the homes at or above the federal limit.

The remainder of the homes tested in those three counties averaged 1.4 picocuries with just 5 percent of the homes at or above the radon limit.



135X

Resolution 88-[illegible]

RESOLUTION REGARDING PESTICIDES
FOR THE SHADE TREE COMMISSION

Freeholder D'Amico offered the following resolution and moved its adoption:

WHEREAS, the pesticide Sevin is known to be toxic and, if not properly applied and controlled, can pose a danger to the health of citizens of Monmouth County; and

WHEREAS, the New Jersey Department of Environmental Protection and the New Jersey Department of Agriculture have abandoned the use of Sevin and is now using Bacillus Thuringensis (Bt.), which is not toxic;

NOW, THEREFORE, BE IT RESOLVED, that the Monmouth County Board of Chosen Freeholders recommends that the Monmouth County Shade Tree Commission take the following actions:

1. Require all municipalities which proceed with the use of chemical pesticides, such as Sevin and Dimilin, to notify all residents in the impacted areas, in writing, concerning the precautions to be taken to avoid exposure to those pesticides;

2. Modify its gypsy moth control program to eliminate the use of Sevin and recommend the use of Bacillus Thuringensis (Bt.) wherever possible and Dimilin when necessary in high gypsy moth infestation areas, in its program for municipalities and County lands in 1989 and future years; and

3. Refrain from the use of Dimilin in areas that would affect streams, ponds and waterways in its gypsy month control program for 1989 in accordance with manufacturers' instructions.

Seconded by Freeholder Villapiano and adopted on the following roll call vote:

	YES	NO	ABSENT	ABSTAIN
Harry Larrison, Jr.	(x)	( )	( )	( )
Thomas J. Powers	( )	( )	(x)	( )
Theodore J. Narozanick	(x)	( )	( )	( )
John D'Amico, Jr.	(x)	( )	( )	( )
John A. Villapiano	(x)	( )	( )	( )

CERTIFICATION
I HEREBY CERTIFY THE ABOVE TO BE A TRUE COPY OF A RESOLUTION ADOPTED BY THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF MONMOUTH AT A MEETING HELD April 26, 1988

136X

FOOD SAFETY—MATRIX I

"Renew America" Report 1989

	1 CASH RECEIPTS FROM CROPS, LIVESTOCK, POULTRY ($MILLIONS)	2 FARM PRODUCT AS PERCENT OF GSP	3 ACTIVE INGREDIENTS OF 25 PESTICIDES USED (THOUSAND LBS.)	4 STATE PESTICIDE USAGE REPORT		5 PESTICIDE RESIDUE TESTING AUTHORITY	6 SUSTAINABLE AGRICULTURE	7 ORGANIC LABELING CERTIFICATION	8 IPM ACRES (THOUSANDS)	9 IPM EXPENDITURES ($THOUSANDS)	10 BIOLOGICAL CONTROL FUNDING ($THOUSANDS)
Alabama	2,077	2.1	5,627	None		X			1,071	564	275
Alaska	26	0.1	-	Limits	84				5	50	
Arizona	1,529	1.5	1,898	Limits	86	X			552	0	478
Arkansas	3,280	5.6	11,938	Major	85	X			3,964	450	494
California	13,970	1.5	9,513	Limits	86	X	P	L		850	6,460
Colorado	3,164	2.1	3,974	Most	81	X			87	9	160
Connecticut	316	0.4	302	Limits	85	X			7	58	273
Delaware	490	1.9	1,179	None					42	55	85
Florida	4,741	1.8	6,638	Limits	85	X			197	66	2,349
Georgia	3,327	1.7	12,761	Limits	79				709	535	816
Hawaii	540	2.0	-	Most	84	X					285
Idaho	2,063	8.2	2,735	None					24	30	545
Illinois	7,768	1.6	40,953	Major	85	X			15,800	0	363
Indiana	4,597	2.4	22,824	Major	78	X			285	0	299
Iowa	9,201	10.4	46,783	Major	85	X	PC	L	855	0	109
Kansas	5,741	6.6	15,234	Major	78	X			14,955	157	268
Kentucky	2,871	3.2	6,562	Limits	79	X			48	5	534
Louisiana	1,460	0.9	9,748	Major	78	X			2,831	176	311
Maine	378	1.1	645	Limits	79	X		L	119	55	118
Maryland	1,148	0.8	3,702	Limits	85	X			654	164	132
Massachusetts	389	0.3	353	None		X		L	11	165	170
Michigan	2,850	1.1	13,744	Major	78	X			285	115	320
Minnesota	6,472	4.4	22,310	Major	84	X	P	LC	1,046	200	409
Mississippi	2,136	3.0	7,173	Major	79				3,192	489	195
Missouri	3,668	2.3	16,321	Major	78	X			145	164	160
Montana	1,207	7.8	5,380	Limits	81	X	P	L	88	98	166
Nebraska	7,206	12.0	18,156	Major	82	X	P	L	558	46	109
Nevada	222	0.6	27	Limits	85	X					
New Hampshire	107	0.5	67	Most	84	X		L	8	8	10
New Jersey	591	0.3	1,275	Most	84-85				24	420	149
New Mexico	1,086	1.9	1,382	Major	83	X			45	77	118
New York	2,564	0.4	5,807	Most	80	X			217	403	782
North Carolina	3,914	2.0	10,763	None		X			2,385	193	321
North Dakota	2,746	14.4	8,828	Major	84	X		L	4,308	30	155
Ohio	3,940	1.1	19,908	Most	83,86	X	P		212	70	902
Oklahoma	2,664	3.4	4,968	Major	81	X			153	0	133
Oregon	1,778	3.0	3,258	Most	86	X		L	15	7	485
Pennsylvania	3,150	1.0	7,661	Major	78				92	21	149
Rhode Island	63	0.4	25	None		X			3	0	14
South Carolina	1,033	1.0	5,484	Major	82	X			125	208	306
South Dakota	2,980	15.3	8,105	Major	78			L	1,259	73	21
Tennessee	2,057	1.6	5,480	None		X			270	63	194
Texas	9,298	1.6	20,666	Limits	80	X	P	LC	7,199	500	2,309
Utah	548	1.5	1,097	Most	77	X			2	0	57
Vermont	384	2.7	517	Limits	82	X		L	5	22	
Virginia	1,627	0.9	5,221	None		X			930	0	385
Washington	2,797	2.6	4,280	Limits	85	X		LC	74	10	303
West Virginia	241	0.8	696	None		X			32	0	22
Wisconsin	5,111	4.0	14,106	Most	85	X	P	L	225	0	824
Wyoming	589	1.6	1,471	Major	83	X					81

A Summary of State Laws and Regulations Governing the Commercial Lawn Care Industry

STATE	SIGN POSTING	ADVANCE NOTICE	CONSUMER INFORMATION	APPLICATOR CERTIFICATION & TRAINING	RECORD KEEPING	INCIDENT REPORTING SYSTEM	OTHER PROVISIONS
ALABAMA	not required	not required	not required	inadequate	1 year	none	no license or training
ALASKA	not required	not required	not required	inadequate	RUP only*	Voluntary	none
ARIZONA	not required	not required	Company must provide pesticide name	All applicators tested and certified by the state	3 years	Voluntary	none
ARKANSAS	not required	not required	not required	inadequate	2 years	none	none
CALIFORNIA	not required	not required	Upon request, company must provide label and health warnings	All applicators trained by employer	2 years	Mandatory reporting of physicians and applicators	no license or train
COLORADO	not required	not required	Company must provide pesticide name, application date and appropriate warnings	inadequate	2 years	none	none
CONNECTICUT	not required*	not required*	Company must provide label for site treated	All applicators tested and certified by the state	5 years	none	CPA will weigh in on new law
DELAWARE	not required	not required	Upon request, company must provide label	All applicators trained by employer	2 years	Voluntary	included in training
DISTRICT OF COLUMBIA	not required	not required	not required	inadequate	3 years	none	included in training
FLORIDA	not required	not required	Upon request, company must provide label	All applicators trained by employer	RUP only	Mandatory reporting by physicians and applicators	Restrictions on use of RUPs through posting of lawns and markings
GEORGIA	not required	not required	not required	inadequate	2 years	none	none
HAWAII	not required*	not required	not required	inadequate	RUP only	none*	none
IDAHO	not required	not required	not required	On-site supervision	2 years	none	none
ILLINOIS	not required	not required	not required	All applicators tested and licensed by the state	RUP only	none	none
INDIANA	not required	not required	Upon request and only if mixed with fertilizer	All applicators trained, tested and registered by the state	RUP only	none	included in training and testing
IOWA	not required*	not required*	not required*	All applicators tested and certified by the state	3 years	Mandatory reporting by physicians	included in training and testing
KANSAS	not required	not required	not required	All applicators trained by employer	3 years	none	included in training and testing
KENTUCKY	not required	not required	not required	All applicators tested and licensed by the state	RUP only	none	none
LOUISIANA	not required	not required*	not required	inadequate	4 years	none*	included in training
MAINE	48 hours	not required	not required	On-site supervision	2 years	none	included in training
MARYLAND	48 hours	Advance notice to those on registry	Company must provide label for site from label and State Consumer Information Sheet	All applicators trained by employer	3 years	none	included in training
MASSACHUSETTS	72 hours*	Upon request, advance notice to customers & neighbors	Company must provide a State Consumer Information Sheet**	All applicators tested and licensed by the state	3 years	none	included in training
MICHIGAN	not required	not required	not required**	inadequate**	RUP only	none	none**
MINNESOTA	not required*	not required	Company must leave a copy of pesticide use record*	All applicators tested and licensed by the state	5 years	none	included in training
MISSISSIPPI	not required	not required	Upon request, company must provide label	inadequate	2 years	Mandatory reporting by physicians	none
MISSOURI	not required	not required	not required	inadequate**	RUP only**	none	included in training and testing
MONTANA	not required	not required	RUPs only	All applicators trained by employer	State keeps use records for 2 years	Voluntary	included in training
NEBRASKA	not required	not required	not required	inadequate	RUP only	Voluntary	none
NEVADA	not required	not required	not required	On-site supervision	2 years	none	none
NEW HAMPSHIRE	not required**	Advance written notice to all customers**	Company must provide pesticide name and time and method of application	On-site supervision	State keeps use records	none	none
NEW JERSEY	24 hours	Upon request, customers and neighbors get prior notice	Company must provide pesticide name, pertinent label warnings, and a Consumer Information Sheet**	All applicators trained by employer	3 years	none	included in training and testing
NEW MEXICO	not required	not required	Upon request, company must provide a copy of the use record**	All applicators tested and licensed by the state	3 years	Mandatory reporting by physicians	included in training and testing
NEW YORK**	24 hours	48 hours prior notice to all customers	Company must provide written contract, label and Notification Cover Sheet	inadequate	State keeps chemical use records	none	none
NORTH CAROLINA	not required	not required	not required	inadequate	RUP only	Voluntary**	included in training
NORTH DAKOTA	not required	not required	not required	inadequate	3 years	none	included in training
OHIO	not required	not required	not required	inadequate	3 years	Mandatory reporting by applicators	included in training and testing
OKLAHOMA	not required	not required	not required	On-site supervision	3 years	none	none
OREGON	not required	not required	not required	inadequate	3 years	Mandatory reporting by physicians	none
PENNSYLVANIA	not required	Advance notice to those on registry**	not required**	inadequate**	RUP only**	none	none
RHODE ISLAND	72 hours	Upon request, 48 hours prior notice to customers and neighbors	Company must provide label, company name and number, and state env. dept. phone number	On-site supervision	State keeps RUP records only	none	State agencies 20% of pesticide purchase on RUP program
SOUTH CAROLINA	not required	not required	not required	inadequate	none	none	included in training
SOUTH DAKOTA	not required	not required	not required	inadequate	3 years	none	none
TENNESSEE	not required	not required	Company must provide pesticide name, amount and concentration	All applicators tested and certified by the state	3 years	none	none
TEXAS	not required	not required	not required	All applicators trained by employer	2 years	Voluntary	included in training and testing
UTAH	not required	not required	Company must provide pesticide name and amount used	All applicators trained, tested and licensed by the state**	2 years	none	none
VERMONT	not required	not required	Company must provide label, amount used and target pest	On-site supervision	State keeps use records	none	included in training
VIRGINIA	not required*	not required	not required	inadequate**	RUP only**	Voluntary	none**
WASHINGTON	not required	not required	Upon request, company must provide label	inadequate	2 years	Voluntary	included in training
WEST VIRGINIA	not required	not required	not required	inadequate	3 years	none	none
WISCONSIN	not required	not required*	not required	All applicators tested and certified by the state	3 years	Mandatory reporting by physicians	included in training
WYOMING	not required	not required	not required	inadequate	RUP only	none	none

* RUP = restricted use pesticide

* Connecticut's regulations, which were drafted pursuant to a 1989 pesticide law, are still pending. 24 hours is the expected posting interval. The regulations will also require 24 hours advance notice to those on a special registry. Lawn care companies will be required to notify all customers of the registry.

* Hawaii law gives the state discretionary authority to require posting for some pesticides. The Hawaii Department of Health is currently developing a pesticide posting reporting system.

* Iowa's regulations, which were drafted pursuant to the Groundwater Protection Act of 1987, are still pending. 24 hours is the expected posting interval. The regulations will require companies to provide a copy of the pesticide label if requested. Although the law allows the state to require advance notice, the proposed regulations presently do not include such requirements.

* Final regulations that will establish a mandatory reporting system by physicians are due out mid-1990.

* The Department of Agriculture and Health will implement a registry for the chemically-sensitive sometime this spring. The registry will be initially voluntary (modeled on Pennsylvania).

* Massachusetts posting interval is recommended, not required.

* Minnesota law sets guidelines for municipalities that adopt posting ordinances.

* Records must include date and rate of application, name of pesticide(s) used, temperature and wind speed and direction, and name, address # and address of applicator.

** After each application, company must also provide customers with the name of the pesticide(s) used, the applicator's name, the target pest and the date and time of application.

** By January 1, 1990, as a result of a 1989 law, all applicators in Missouri will be trained and licensed. The new law also requires the state to record-keeping requirements for all pesticides.

** New York's regulations were organized pending the outcome of several lawsuits brought against the state by pesticide industry interests.

** The North Carolina Dept. of Human Resources runs an office which educates physicians and keeps records of pesticide poisonings.

** Applicators in Pennsylvania are not required to notify people on the state's registry; the system is strictly voluntary.

** Proposed regulations would require the applicator to provide a copy of the pesticide label if requested. Presently, if a customer wants specific pesticide information, he/she must request the information under the PA Right-to-Know law from the PA Dept. of Labor and Industry.

** Proposed rules expected in mid-1990s would require all applicators to be trained and records to be kept for 3 years for all pesticides.

** Proposed rules that would provide customers the opportunity to request advance notice are due to be implemented by 1990.

** Pursuant to a law approved by the Michigan governor on December 28, 1989, the Dept. of Agriculture is required to submit rules by April 1990 requiring commercial applicators to inform customers of the potential risks and benefits associated with the applications of pesticides. The new law will also require all applicators to be trained and tested. (The state is also required to develop IPM programs for schools, public buildings and health care facilities)

** The regulations also require that consumers must be informed of their right to request additional advance notice before each application.

** At multi-family dwellings, the company must either post a warning sign or make arrangements with the building manager to notify all residents.

** The Consumer Information Sheet is not written by the state, but must include the following information: company name, address and telephone #; interpreter # for NJ Dept. of Health and Human Information and Education System; and a general statement about pesticide toxicity and use. The law requires that all the above information be provided to the consumer prior to any pesticide application.

** In some cases, an applicant for certification is permitted to study the training materials and take the test without going through training.

** According to a law signed by the governor in April, 1989, the state has the power to require commercial applicators to inform the public when using pesticides in and around structures. The new law will also require all applicators to be registered with the state.

** The 1989 Virginia law establishes a Pesticide Control Board which has the authority to, among other powers, require additional record keeping rules and "[m]onitor the citizens of Virginia as to the unavailability and availability of nonchemical and less toxic alternatives as a method of prevention, while promoting the use of biological pest management techniques and encouraging the development of nonchemical and less toxic alternatives..."

** New Mexico law requires must include name of customer, target pest(s), time and date of application, pesticide name(s), wind direction and velocity, volume and concentration used, and business name and address.

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Science Academy Recommends Resumption of Natural Farming

Subsidies Found to Encourage Chemical Overuse

By KEITH SCHNEIDER
Special to The New York Times

WASHINGTON, Sept. 7 — The National Academy of Sciences has found that farmers who apply little or no chemicals to crops can be as productive as those who use pesticides and synthetic fertilizers, and today it recommended changing Federal subsidy programs that encourage overuse of agricultural chemicals.

In a study, the Academy's Board on Agriculture said it was seeking to reverse Federal policies that for more than four decades have been focused on increasing the productivity of crop and livestock farms principally through heavy use of pesticides, drugs and synthetic fertilizers. The staff of the Board on Agriculture, led by Dr. Charles M. Benbrook, the executive director, in the past has advocated farm practices that rely less on chemicals.

The report's authors said Congress and the Department of Agriculture should change farm policies that have discouraged farmers, particularly those who grow crops subsidized by the Government, from trying natural techniques. The reason, it said, is that the subsidy program, with its unnatural economic forces, caused farmers to reject practices that were less destructive to the environment.

Subsidies and Overproduction

In the Federal corn program, for instance, farmers are paid a subsidy of roughly $1 for every bushel they can produce; the incentive is to produce the most bushels possible. Since the end of World War II, farmers have been taught by agricultural universities and the Department of Agriculture that the best way to increase output is to use ample amounts of chemical fertilizer and then protect the harvest with generous applications of pesticides.

If farm subsidies were reduced, researchers say, it is likely that farmers would no longer produce surpluses marketable only to the Government, and would be encouraged to try natural farming techniques. That would bring supply in line with demand, raising prices and making up for the subsidies. The effect on consumer food prices is not expected to be dramatic because the cost of grain is a small fraction of overall food costs.

This year, farm subsidies cost the Government $13.9 billion.

An Important Confirmation

The study by the nation's pre-eminent body of scientists is perhaps the most important confirmation of the success of agricultural practices that use biological interactions instead of chemicals. Such farming methods have been developed by farmers over the last two decades almost entirely outside the Department of Agriculture, agricultural universities and other institutions in American farming.

Until very recently, farming methods shunning chemicals have been viewed by many farmers and farm policy leaders as unorthodox and incapable of generating harvests that match those produced with chemicals.

The study, paid for by the Depart-

Continued on Page B5, Column 2

The New York Times

987 Copyright © 1989 The New York Times NEW YORK, FRIDAY, SEPTEMBER 8, 1989 50 cents beyond 75 miles from New York

Academy Says Chemicals Do Not Necessarily Increase Crop Yields

Continued From Page A1

ment of Agriculture, the Kellogg Foundation and four other groups, comes at the start of debate in Congress over a new farm policy law and amid nationwide concern about the toll industrialized farm practices have taken on the environment, on public confidence in the safety of the food supply and on the Treasury.

"Well-managed alternative farms use less synthetic chemical fertilizers, pesticides and antibiotics without necessarily decreasing, and, in some cases, increasing per-acre crop yields and the productivity of livestock systems," said the committee in the report, "Alternative Agriculture."

Enthusiasm in Washington

"Wider adoption of proven alternative systems would result in ever greater economic benefits to farmers and environmental gains for the nation," it said.

The Department of Agriculture, which was suspicious of natural farm practices during the 1980's, greeted the study enthusiastically, saying the "time was right" to consider changes in the direction of American agriculture.

But Some Are Skeptical

Several groups, however, were critical of the academy's conclusions. "There seems to be little science involved in this whole area," said Thomas E. Waldinger, a spokesman for the Fertilizer Institute, the Washington-based industry association for the $8 billion United States fertilizer industry. "The farms that the academy selected to study were already determined to be successful in deploying alternative agriculture practices. It's like saying they're not going to pay attention to those who have tried it and failed."

The Board on Agriculture said natural farm practices are not a single method of farming, but rather a spectrum of farming techniques that have the common goals of reducing costs, preserving the environment and protecting human health by sharply lowering or eliminating toxic farm chemicals and animal drugs.

Among the practices cited as successful by the report's authors are careful rotations of crops to battle weeds, diseases and insects, and to provide nutrients naturally. Another is the production of a number of crops and livestock in combination. A diverse crop and livestock system, the report said, enables farmers to protect themselves from cyclical swings in price for any single crop.

The report said natural practices frequently take more work than chemical-based practices, and the report's authors expressed concern about the number of people with the management skills and inclination to use the practices effectively.

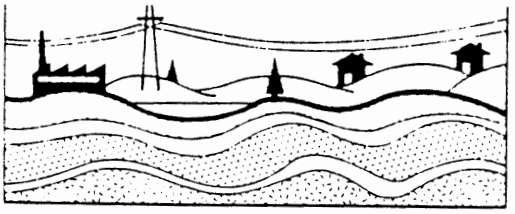
14 Farms Were Studied

In its study, which was begun in 1984, the Board on Agriculture closely examines 14 farms in Ohio, Iowa, Virginia, Pennsylvania, California, Florida and Colorado which have developed successful natural production methods.

It is not known how many American farmers practice natural techniques, but it is thought that at least five percent of the nation's 2.1 million farmers have adopted such techniques; the numbers may be much greater.

A 720-acre dairy, cattle and grain farm in Knox County, Ohio, managed by Rex and Glen Spray achieved yields of corn that were 32 percent higher and yields of soybeans 40 percent higher than the county average without using synthetic fertilizers and pesticides for more than 15 years, the study said. The Spray brothers controlled weeds by rotating corn, soybeans, small grains and red clover in their fields and uprooting weeds mechanically. They use manure from their herds instead of synthetic fertilizers.

In addition to the problems of overproduction, the environmental costs of using large amounts of chemicals have become more apparent in the 1980's, the study said. Weeds and insects develop genetic resistance to farm chemicals, often forcing farmers to use ever greater amounts to achieve the same effect.



Hazard
Elimination through
Local
Participation

NJ Right to Know
& Act Coalition
10 Rutgers Place
Trenton, NJ 08618
(609) 392-2771

Co-Chairs
▷ Jane Nogaki
Coalition Against
Toxics
▷ Eric Scherzer
Oil Chemical
& Atomic Workers
Local 8-149

Steering Committee
(in formation)
▷ Amy Bahruth
Communications
Workers of America
▷ Ken Brown
NJ Environmental
Federation
▷ Arnold Cohen
Ironbound Committee
Against Toxic Wastes
▷ Rick Engler
Industrial Union
Council, AFL-CIO
▷ Neal Gorfinkle
White Lung Association
▷ Mark Herzberg
NJ Environmental Lobby
▷ Bill Kane
United Auto Workers,
Region 9
▷ Paul Landsbergis
UMDNJ-Occupational
Health Division
▷ Robin Mama
Philadelphia Area
Project on
Occupational
Safety & Health
▷ Mary Ann Marian
NJ Citizen Action
▷ Peter Montague
Environmental
Research Foundation
▷ Eileen Nic
Citizens Commission
on Bhopal
▷ Ray Peterson
NJ State Federation
of Teachers
▷ Ira Stern
International Ladies'
Garment Workers Union
▷ Trudi Thornton
NJ Education Association
▷ Ivey Williams
International Chemical
Workers Region 3

Counsel
David Tykulsker
Peg Hayden
Ira Jay Katz
Bennet Zurofsky

October 3, 1989

Senator Raymond Lesniak
Senate Labor, Industry and Professions Committee
State House LAnnex CN-068
Trenton, NJ 08625

Dear Senator Lesniak and Labor Committee Members,

Thank you for holding a hearing on October 10th on your bill, Amendments to the Pesticide Control Act, S-3741. This is a bill which we strongly support in its entirety, and at our last coalition meeting we passed a resolution to support this bill.

It is extremely important to farmworkers and community members alike that precautions against pesticide misuse and disclosure about pesticide applications take place. We know that this is a concern to you as well.

Among national concerns about the environment, concern about pesticides ranks in the top three both among citizens at large and at the Environmental Protection Agency itself. With documented groundwater and wellwater contamination by pesticides already occuring in New Jersey, it is time now to address this concern in a preventive way.

This bill is a common sense approach to pesticide use in New Jersey. It builds in a way to get a handle on what pesticides are problematic in New Jersey , and gives voice to all the interest groups who use or are affected by pesticides. It fills a noticable gap in the training and protection of farmworkers, who have been systematically excluded from both federal and state right-to-know laws. Each part of this bill has been implemented in other states, although no state has a law so comprehensive as the one proposed.

Farmworkers are the persons who work in fields which are sprayed with pesticides from three to fifteen times during a growing season. Accidents happen. (See enclosed clipping) They could be prevented. Prevention will help to protect not only farmworkers, it will protect all citizens who are the ultimate consumers of pesticides on the field crops which are picked, when those foods come to the table. It is time for equity and justice for farmworkers, so that they have the same rights as other workers in our state.

Again, thank you for hearing this bill. You have our full support.

Sincerely,

Jane Nogaki

Eric Scherzer

Jane Nogaki, Co-Chair

Eric Scherzer, Co-Chair

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NJ RIGHT TO KNOW AND ACT COALITION
(in formation)

Allied Citizens Opposing Pollution! * Aluminum, Brick & Glass Workers 514 * Amalgamated Clothing and Textile Workers Union 1298, and Central & So. Jersey Joint Board * American Ass'n of University Professors- Faculty Ass'n of Monmouth College & Rutgers Council of AAUP Chapters * American Fed. of State, County & Municipal Employees, Councils 1, 52, 71 & 73 and Locals 1761, 1911 * Bergen County Central Trades & Labor Council, AFL-CIO * Boilermakers 777 * Borg's Woods Preservation Coalition * Burlington County Central Labor Council, AFL-CIO * Camden-Gloucester Central Labor Union, AFL-CIO * CATA * Center for Environmental Health Strategies * Central Jersey Environmental Task Force * Chemical Workers Ass'n-Int'l Brotherhood of Dupont Workers * Citizens Commission on Bhopal * Coalition Against Toxics * Committee of Interns & Residents * Communications Workers of America, District 1 & Locals 1000, 1001, 1002, 1006, 1007,1009, 1021, 1031, 1032, 1033, 1034, 1037, 1038 ,1039, 1040, 1058, 1060, 1065, 1066, 1080, 1081, 1082, 1085, 1087, 1088 * Cornucopia Network of NJ * Council of NJ State College Locals, AFT * Cumberland-Salem Central Labor Union, AFL-CIO * Delaware Valley Clean Air Council * Delaware Valley Toxics Coalition * Environmental Research Foundation * Essex-West Hudson Labor Council, AFL-CIO * Food & Water * Grass Roots Environmental Organization * Gray Panthers of So. Jersey * Hotel Employees Restaurant Employees 54 * Hometowns Against Shutdowns * Independent Laboratory Employees' Union * Int'l Ass'n of Machinists 329, 677, 1455, 1812 * Int'l Brotherhood of Electrical Workers 327, 827 * Int'l Chemical Workers Union, Region 3, Locals 155, 527 * IFPTE 195 * Int'l Ladies' Garment Workers' Union, AFL-CIO * Bergen/Hudson, Essex/Central, Phila/So. Jersey District Councils * Int'l Union of Electronics Workers 134, 401, 417, 440, Furniture Workers Division-76B * Ironbound Committee Against Toxic Wastes * Jersey City State Fed. of College Teachers, AFT 1839 * JNESO * Lawyers Encouraging Government and Law * Mercer County Central Labor Council, AFL-CIO * Mobilab Union, Inc. * Monmouth County Friends of Clearwater * National Ass'n of Retired Federal Employees- Cherry Hill * National Toxics Campaign * NJ Citizen Action * NJ Coalition of Labor Union Women * NJ Education Association * NJ Environmental Federation * NJ Environmental Lobby * NJ Industrial Union Council * NJ Rainbow Coalition * NJ State Federation of Teachers, AFT * NJ State Police Benevolent Ass'n * The Newspaper Guild 10 * Occupational Health Div., Robert Wood Johnson Med. School * Ocean County Citizens for Clean Water * Office & Professional Employees Int'l Union 32 * Oil, Chemical and Atomic Workers, District 8 Council & Locals 8-149, 8-5570 * Passaic County Labor Council, AFL-CIO * People United for a Klean Environment * Philadelphia Area Project on Occupational Safety & Health * Residents for Environmental Preservation and Protection * Retail, Wholesale & Dept Store Union 108,1034 * United Auto Workers, Region 9 * United Electrical, Radio & Machine Workers District 1 * United Steelworkers of America, District 9 & Local 2026 * United Textile Workers of America 276 * Utility Co-Workers' Ass'n * Save-the-Hawk * Service Employees Int'l Union 455 * Stop the RocAjet Incinerator Project * White Lung Association * Winslow Township Environmental Commission

And the Independent Oil Workers, Environmental Response Network(AC), OCAW 8-575, NJ State Firemen's Mutual Benevolent Assoc., Action to Save the Environment

July 1989 Salem Sunbeam

Senator's farm faces fines

By KAREN ZABEL
Staff Writer

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UPPER PITTSGROVE TWP. — State Department of Environmental Protection officials acknowledged Thursday that they are considering levying $20,000 in fines against Larchmont Farms Inc., owned by state Sen. C. William Haines and his son, for an incident in June in which two state inspectors were reportedly sprayed with pesticide.

According to DEP spokesman John Haggerty, department inspectors Dan Russell and Thomas Kosinski were performing a routine inspection of Larchmont Farms on June 28 when they were allegedly sprayed by a passing "tractor." The 900-acre farm spans both Salem and Cumberland counties.

Russell and Kosinski are employed by the DEP's Bureau of Pesticide Control.

Haggerty said the inspectors did not require medical treatment following the incident. He would not identify the pesticide but did confirm that it has a low toxicity level.

"As (Russell and Kosinski) were driving by, they saw a tractor, apparently spraying pesticides," said Haggerty. "They stopped to make an investigation and as the tractor passed by, the pesticides landed on the inspectors and their vehicle."

Contacted at his home Thursday evening, Haines, R-8, said he had not been informed of the investigation.

"Are you telling me the DEP is reporting to the press information that it is not reporting to the people involved? Because if that's true, we're in deep trouble, because that's

for spraying inspectors

a situation which smells of Gestapo Germany," he said.

"If that's true, Hitler Gestapo tactics are being performed," he said. "You're illustrating to me an agency that wants to destroy a legislator.

"If DEP had a problem with us on June 28, they would have gotten in touch with us immediately," he added. "What I'm saying basically is that there has been no report given to me as owner of the farm."

The senator said he works with the DEP "on a daily basis."

When asked about the validity of the allegations, Haines said there was "no way" the charges could be true.

"That couldn't happen," he said. "There's no way we would do this. We don't spray anyone, let alone DEP inspectors or our own help."

Haines said his son, Charles Haines III, is responsible for managing the farm's spray program.

During a phone interview, Charles Haines III said he had not been informed of the investigation.

"I don't think (the inspectors) were on the premises (on June 28)," he said. "If they were there and something like that happened, they would have approached me."

Charles Haines III continued that summer 1988 was the last time he had seen a DEP inspector on the farm.

Haggerty said tests have been performed on samples of the inspectors' clothing as well as samples of soil and vegetation outside of the pesticide target area. Results of those tests could not be released to the public at this time, he said.

According to Haggerty, the two inspectors questioned the driver of the tractor and several field hands concerning the pesticide that was being applied to the orchard. The farm grows peaches and apples.

(See FINE, page A-8)

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(Continued from page A-1)

seven months after the fine was initially levied.

"I will concede that there was a delay in referring the matter," Haggerty said in a telephone interview Thursday morning. Later, Haggerty characterized the seven-month delay as "normal."

"We process hundreds of these," he said. "This was no exception. It's unfortunate, but it just got caught up in the system."

Instead of referring the matter to the deputy attorney general, Haggerty said a reminder notice was issued to Larchmont on Jan. 30 of this year, five months after the original notice was issued. When no response was made, Haggerty said the division advised the office of DEP Commissioner Christopher Dagget that the fine remained unpaid.

Haggerty said the commissioner's office then "bumped back" the matter of the fine and its collection to the Division of Fish, Game and Wildlife. In turn, Haggerty said, the division responded by filing a report with the office of the deputy attorney general on March 13.

Some DEP officials familiar with the investigation have questioned the nature of the delay.

"There has been no influence with the commisioner's office regarding the violation," Haggerty said. "We're treating this violation in the normal manner."

Deputy Attorney General Neil Magnus said the case "might well be ripe for prosecution."

"Usually, we try to move for prosecution of a case within 12 or 13 months of the time it initially occurred," Magnus said of the case, which passed the 16-month mark earlier this month. "Unfortunately, we have many hundreds of these cases, plus the ones the state police give us. We're just a few months off — that's not serious."

Magnus said prosecution could be expected to commence within the next 10 days.

"We treat everyone the same," Magnus said. "Justice may be slow, but the law will be enforced, period. It makes no difference who owns the farm. The law has to be enforced. That's the way it has to be."

The 900-acre farm, whose property spans both Salem and Cumberland counties, is currently under investigation by the DEP for the alleged spraying of two DEP inspectors with pesticide.

Carl Golden, press secretary for Gov. Thomas Kean, contacted Wednesday about the case, said that his office had no information or interest in the case.

"Did you ever think maybe the director (of the Division of Fish, Game and Wildlife) is trying to keep you from finding out something?" Golden said. "Well, that's a possibility."

DEP admits delay

Agency waited to act on Haines fine

By KAREN ZABEL
Staff Writer

UPPER PITTSGROVE TWP. — A state Department of Environmental Protection official conceded Thursday that the agency delayed for seven months calling in the state Attorney General's Office to take legal action against state Sen. C. William Haines, R-8, and his son, Charles Haines III, to collect a $6,000 fine.

The fine was levied by the DEP's Division of Fish, Game and Wildlife after an inspector from that division in May 1983 discovered a pesticide spill on Larchmont Farms which is owned by Haines and his son.

Samples taken from the site at the time of the incident revealed high levels of the pesticides captan, ethyl-parathion and dursban. DEP Bureau of Pesticides Inspector Thomas Kosinski said the spill represented a "possible contamination of wetland area."

According to documents filed by the DEP, the spill occured in an area whose runoff flows to the Cohansey River. Under state statutes, $6,000 is the maximum penalty allowable for wetlands pollution.

Documents reveal the fine was levied Aug. 3 of last year, and was due to be paid three weeks later on Aug. 24, 1988. A DEP letter mailed Aug. 3, 1938 to Larchmont Farms indicated that if the fine were not paid in three weeks the matter would be referred to the deputy attorney general "to initiate prosecution for the maximum amount."

DEP spokesman John Haggerty, however, said the matter was not referred to the deputy attorney general's office until March 13, more than

(See FINE, page A-5)

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Fine

(Continued from page A-1)

Today's Sunbeam on Wednesday formally applied to the DEP for the report on the incident but was denied.

Haggerty said the results of the conversation would not be made public until the state investigation is completed.

"We're making every effort to determine the type of pesticide that was being used at the farm at that time," he said.

Haggerty said the DEP was considering "several potential violations" from the June 28 inspection for which fines could reach $20,000.

"The DEP has not made a final determination yet, so I am not in a position to say what types of violations," he said.

Haggerty also confirmed that no DEP inspectors had notified or spoken to the farm's owners regarding the investigation. "But I assume Mr. Haines is aware (of the investigation)," he added.

C. William Haines, in defense of his farming practices, said he was named environmental legislator in 1988.

Ironically, the DEP's Division of Fish, Game and Wildlife assessed a $6,000 fine against Larchmont Farms that year because of a pesticide spill.

According to a letter addressed to Larchmont Farms, DEP Conservation Officer Lt. Stephen J. Murza indicated that drainage from the affected area flows into the Cohansey River.

The investigation also resulted in a fine of $1,000 against the farm and a $750 fine against Charles Haines III. Both fines were levied by the DEP's Bureau of Pesticide Control.

Haggerty said the investigation into the June 28 inspection would be completed "very shortly."

"The investigation is being completed in as speedy a manner as possible," he said. "I hate to put an exact timetable on our inspections."

Other DEP officials said the investigation is expected to be completed in seven to 10 days.

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266 Wall Street
West Long Branch, N.J. 07764
October 3, 1989

Senator Raymond Lesniak and
Senator John D'Amico

Dear Senators Lesniak and D'Amico:

With reference to the upcoming public hearing on S-3741, the Pesticide Bill which you introduced at the end of June, we would like to affirm our wholehearted support for this important and necessary addition to our State's pesticide control legislation. It closes many of the gaps and loopholes which diminished the effectiveness of P.L. 1971.

As you may be aware, we have been determined supporters of increased pesticide controls for some years. In addition to being dedicated conservationists, we own and manage a small farm, and thus have a certain amount of first hand experience in these matters. This includes having witnessed the negative impacts of aerial pesticide spraying of Sevin on honey bees and other beneficial insects. We like to think our personal efforts helped encourage the Monmouth County Board of Freeholders to pass their resolution against the spraying of that particular poison. Despite predictions to the contrary, the use of BT has proved a good substitute in gypsy moth control.

When we ourselves were employing organic farming methods, we were impressed with results of encouraging beneficial insects to combat the destructive ones. Therefore, we were particularly pleased to note that S-3741 would provide for a person with integrated pest management experience to be on the expanded Pesticide Control Council.

Sincerely,

Robert I. Owen and Mary H. Owen

NEW JERSEY COALITION FOR ALTERNATIVES TO PESTICIDES
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Testimony of

NEW JERSEY COALITION FOR ALTERNATIVES TO PESTICIDES

Before the

Senate Labor, Industry and Professions Committee

on

Senate Bill No. 3741

October 10, 1989

Susan Shaw

New Jersey Coalition for Alternatives to Pesticides (NJCAP) was formed eight years ago in response to the public's growing concern over the use and misuse of pesticides and the consequent health and environmental effects associated with their use. Our membership includes municipalities, environmental commissions, private citizens and national, state and local environmental organizations.

We support Senate Bill No. 3741 in its entirety. This bill seeks to reduce human exposure to pesticides, helps prevent contamination of water supplies as well as fish and wildlife habitat and seeks to find out more about the potential ill-effects of pesticides.

PESTICIDE USAGE AND POTENTIAL FOR EXPOSURE

Vast quantities of pesticide compounds are sprayed or injected into soils in New Jersey. A 1978 report prepared by the NJ Department of Health indicated that more than 4 million pounds of pesticides were applied on agricultural lands in New Jersey during 1977. [1] For mosquito control, about 85,000 pounds of pesticides were applied in 1977. This report did not estimate urban pesticide use, but an Environmental Protection Agency report suggests that urban pesticide use equals that of agriculture.

NEED FOR THIS BILL - POTENTIAL HEALTH AND ENVIRONMENTAL EFFECTS OF PESTICIDES

The public and the environment are being exposed to numerous hazardous pesticides. It has been estimated that as many as 60% of the pesticides in use have not been tested or not fully tested to assess their potential for causing cancer or birth defects; about 90% have not been tested for genetic mutations. [2]

According to the National Research Council, "neither the EPA (Environmental Protection Agency) nor USDA (US Department of agriculture) has developed formal procedures to calculate the economic benefits of pesticides under regulatory review". "The benefits of pesticides that are developed tend to over-estimate the actual value of pesticides under review for health

and environmental effects by not fully accounting for non-chemical alternatives". "This policy helps to preserve market share for older compounds known to pose health and environmental hazards." [3]

In addition, "the Environmental Proection Agency does not dispute the scientific findings that legally permissible levels of pesticides can be dangerous". "Indeed, the agency has estimated that pesticide residues cause 6,000 cases of cancer each year - many more than exposure to asbestos in homes and schools and as many as passive smoking." [4]

BILL WOULD BAN AERIAL APPLICATION OF CHEMICAL PESTICIDES ON NON-AGRICULTURAL LANDS

This bill will not have negative impacts on pest control because the use of pesticides is still allowed to continue. The bill only seeks to lessen the possibility of health and environmental problems.

The ban on aerial application of chemical pesticides on non-agricultural lands will not have any negative ramifications concerning protection of the public health or an agricultural commodity as exemptions from this provision have been provided in the case of health or agricultural emergencies. Non-chemical alternatives would be utilized aerially for other pest problems. This ban would reduce the impact of chemical pesticides on people, wildlife, beneficial insects and other organisms and would ensure that safer alternatives were used. Connecticut has had this same ban since 1972 as a state law.

The reasons for Connecticut's ban and this ban in the bill is that aerial application has the potential for loss of pesticide and offsite impacts due to airborne transport or drift. ("Drift" can be defined as that portion of the released material that is airborne and leaves the field or other target area being treated.)

Research conducted for the US Environmental Protection Agency shows that when pesticides are applied by airplane between 10 and 60% of the pesticide travels more than 1,000 feet from the intended target area in 3 to 5 mile per hour winds. [5] Based on California Department of Food and Agriculture figures on aerial applications of pesticides in the state during 1977, with 20% not reaching the target area, nearly 17 million pounds of pesticides reach areas that were not intended to be sprayed following aerial treatments. [6] Others have confirmed this such as Ware et al. who reported that on average only 53% of the pesticide applied actually lands in the area intended for spraying. [7] A University of Wisconsin study found some pesticide residue as far away as 2 1/2 miles from the nearest agricultural field. [8] "A study of toxic chemicals in fog by US Department of Agriculture and University of California scientists, published February 12, 1987 in Nature, reported the occurrence of five pesticides in fog droplets sampled in Beltsville, MD and the San Joaquin Valley of California." In June 1988, the California Department of Food and Agriculture released a report that showed ethyl parathion was present at potentially toxic levels in the air near where it was being used.[9]

Ground equipment, while not without its drift problems, may be judged safer to use in terms of limiting drift because the pesticide is applied close to its target, the amount of material released per hour is lower so that less pesticide enters the air within a given time interval and ground application except for mist blowers does not include the air shear which causes droplets to break up in aerial application.[10]

We believe these studies point to the need for the ban on aerial spraying as writeen in the bill.

BILL WOULD REQUIRE DEP TO ESTABLISH NOTIFICATION PROCEDURES

Notification procedures would serve to lessen the possibility of health problems by warning the public of pesticide applications so they can avoid contact with these toxic chemicals.

At present, DEP has in place posting requirements when pesticides are applied on turf and ornamentals. However, posting of signs indicating pesticide applications on agircultural lands, rights of ways and applications to lakes and ponds and for mosquito control are not included under the current notification requirements. In addition, there is no advance notice prior to pesticide applications except in the case of multiple family residences where an occupied unit is to be treated.

BILL WOULD REQUIRE CERTIFICATION

Under the current DEP regulations, many people who apply pesticides commercially have not been certified (passed state DEP exams). These people are required to work under the direct supervision of a certified applicator even though the applicator need not be physically present on site. *

We as well as some reputable chemical companies emphasized at the 1982 public hearings on DEP's proposed regulations, the importance of certification for all people who apply pesticides commercially. This would ensure that they are at least knowledgeable about the toxic nature of pesticides and the precautions to take to minimize exposure. DEP presently supplies guidelines to help with training people who will not be certified.

* 7 states require applicators to be on site.

BILL WOULD REQUIRE MANDATORY REPORTING OF PESTICIDE INCIDENTS

There is no mandatory pesticide reporting system in New Jersey and physicians and veterinarians, in many cases, do not recognize the symptoms of pesticide exposure. As a result, many pesticide poisonings go unrecognized and unreported. This bill would require a program whereby physicians and other health care professionals would be alerted to the symptoms, treatment and reporting of pesticide illnesses. Eight states have mandatory reporting of pestidide illness by physicians.

BILL WOULD GIVE DEP RIGHT TO REQUIRE REGISTRATION OF STRUCTURAL PEST INSPECTORS

At present, anyone can become an inspector of homes for structural pests and issue certificates reporting their findings without having any training whatsoever. The bill would allow DEP the right to require registration of these inspectors as they do other people who apply pesticides and do pest inspections. We believe this registration should be based on a standard of competency.

POSSIBLE FUNDING SOURCES

At present, all pesticides for sale, use or distribution in NJ must be registered with DEP. Each product to be registered requires an annual fee of $80. We should consider raising the registration fees in order to fund important pesticide programs. The fees should be higher on chemical pesticides as opposed to non-chemical botanical pesticides in order to discourage the use of the more toxic pesticides.

Iowa's registration fees range from a minimum of $250 to a maximum fee of three thousand dollars for every brand of pesticide offered for sale in the state. (This fee is set at one-fifth of one percent of gross sales within the state.) Primary producers of pesticides that manufacture an active ingredient which is used to manufacture or produce a pesticide must pay an annual groundwater fee of $2000 in the state of Wisconsin.

IN CONCLUSION,

This bill is a major step to help the public minimize their exposure to pesticides. We hope it has a speedy passage through the legislature.

Susan Shaw

attachments:

Summary of Pesticide Bill
Summary of New Pesticide Notification Regulations

151X

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4. Gilbert, Susan, America Tackles the Pesticide Crisis in the Good Health Magazine (The NY Times Magazine), p. 51, October 8, 1989.
5. von Rumker, Kelso, Horay, Lawrence, A Study of the Efficiency of the Use of Pesticides in Agriculture, Final Report July 1975 for EPA, 540/9-75-025.
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SUMMARY OF PESTICIDE BILL
S 3741

- *EXPANSION OF PESTICIDE CONTROL COUNCIL* , an advisory body to NJ Dept. of Environmental Protection, from 9 to 14 members (to include toxicologist, ecologist, medical doctor trained in occupational safety and health, ground water hydrologist, farmer, organic farmer, one representative from each of the following: farmworker groups, pesticide applicator businesses, environmental organizations, public interest organizations and one person with IPM (integrated pest management) experience. (pages 1 & 2 of bill)
- *EMPOWERS PESTICIDE CONTROL COUNTIL TO CARRY OUT SPECIFIC FUNCTIONS* such as holding public hearings concerning the use and application of pesticides and reviewing comments of the Pesticide Technical Advisory committee. (pages 2, 3)
- *REQUIRES PESTICIDE CONTROL COUNCIL TO SUBMIT ANNUAL REPORT TO GOVERNOR AND LEGISLATURE* concerning PCC's recommendations for legislative or administrative action. (page 3)
- *CREATES A PESTICIDE TECHNICAL ADVISORY COMMITTEE TO ADVISE PCC* and requires them to carry out specific functions such as meeting at least quarterly and submitting at least annually a report to Governor. Also must establish criteria for triggering reviews of pesticides. (page 4)
- *REQUIRES CERTIFICATION (STATE EXAMS) FOR ALL PERSONS APPLYING PESTICIDES. (page 4)*
- *GIVES DEP RIGHT TO REQUIRE REGISTRATION OF STRUCTURAL PEST INSPECTORS* and to base such registration on a standard of competency. (page 6)
- *PROHIBITS AERIAL APPLICATION OF CHEMICAL PESTICIDES ON NON-AGRICULTURAL LANDS.* Exempts mosquito control if there is no practical alternative available. When health and/or agricultural emergencies may necessitate aerial spraying of chemicals, advance notice to specific groups is required. (page 6)
- *REQUIRES DEP TO ESTABLISH NOTIFICATION PROCEDURES* to afford all persons who may be exposed to pesticides the opportunity to avoid exposure. (page 6)
- *ESTABLISHES PERMIT PROGRAM FOR MUNICIPAL GYPSY MOTH CONTROL.* (page 6)
- *REQUIRES DEP TO PREPARE FORMS TO BE COMPLETED BY FARMOWNERS CONCERNING PESTICIDES APPLIED AND RE-ENTRY TIMES.* These forms are to be posted in a central location for farmworkers. (page 7)
- *REQUIRES DEPT. OF HEALTH TO PREPARE PAMPHLETS CONCERNING PESTICIDE SAFETY FOR DISTRIBUTION BY FARMOWNERS TO FARMWORKERS.* (page 7)
- *FARMOWNERS MUST HAVE MATERIAL SAFETY DATA SHEETS ON PESTICIDES STORED OR USED* for farmworkers who request them. (page 7)
- *FARMWORKERS MUST BE TRAINED BY PERSON CERTIFIED BY DEPT. OF HEALTH* concerning hazards of pesticides, ways to minimize pesticide exposure, first aid and laws established to protect farmworkers. (page 8)
- *ESTABLISHES A MECHANISM BY WHICH THE REPORTING OF PESTICIDE INCIDENTS TO DOH TAKES PLACE.* (page 8)
- *REQUIRES DEPT. OF HEALTH TO TRAIN HEALTH PROVIDERS RESPONSIBLE FOR HEALTH SERVICES TO FARMWORKERS* in the recognition, evaluation and treatment of pesticide exposure. (page 8)
- *ESTABLISHES A PROGRAM TO ALERT PHYSICIANS, HEALTH CARE PROFESSIONALS AND VETERINARIANS CONCERNING SYMPTOMS, DIAGNOSIS AND TREATMENT OF PESTICIDE HEALTH EFFECTS.* (page 8)

- *REQUIRES PHYSICIANS AND VETERINARIANS TO REPORT PESTICIDE INCIDENTS TO DEPT. OF HEALTH* (page 9)
- *GIVES EMPLOYEES RIGHT TO REFUSE TO ENTER A FIELD* when instructed to do so before the minimum re-entry time. (page 9)
- *ANY PERSON MAY BRING CIVIL ACTION AGAINST DEP OR DOH FOR FAILURE TO ENFORCE THE PROVISIONS OF THIS BILL.* (page 9)
- *PERSON WHOSE PROPERTY OR PERSON IS EXPOSED TO PESTICIDES RESULTING FROM VIOLATION OF THE BILL MAY BRING CIVIL ACTION* against any person. Compensatory and/or punitive damages may be awarded for violations which are wantonly reckless and malicious. (Page 10)
- *FOR VIOLATIONS OF THE BILL, DEP MAY BEGIN CIVIL ACTION FOR AN INJUNCTION* to prohibit and prevent such violation. (page 12)
- *VIOLATION CARRIES PENALTY UP TO $25,000 FOR EACH OFFENSE.* Each day offense continues after order to cease violation will be considered an additional, separate and distinct offense. Authorizes DEP to allow posting of performance bonds by violators. (page 12)
- *ALL FINES COLLECTED SHALL BE DEPOSITED IN ENVIRONMENTAL SERVICES FUND FOR SUPPORT OF PESTICIDE CONTROL PROGRAMS.* (page 13)

PREPARED BY SUSAN SHAW

NEW JERSEY COALITION FOR ALTERNATIVES TO PESTICIDES

SUMMARY OF NEW PESTICIDE NOTIFICATION REGULATIONS

- Signs must be posted for at least *24 hours* following pesticide applications to lawns, trees or shrubs on single family residences, multifamily residences, commercial buildings, institutions, parks and similar sites. Signs must say "Pesticide Treated Area" and have a symbol with a person and a dog within a circle with a line through it warning to keep off area.
- Golf courses require more extensive posting. Signs are posted at starting tees and include date of last application, area treated, pesticide used, proposed date of next application and person to contact for additional information.
- Posting of permanent signs is required for indoor spraying of institutions, commercial or public buildings. Posting includes date of latest application, pesticide(s) used and person to contact for additional information and proposed date of next application. The regulations are specific as to where the notice is posted. For example, in hotels and motels the notice is posted at the main desk, in restaurants - next to the Health Department inspection card, at schools and places of worship - on a central bulletin.
- At malls, stores, airports and other large public places, signs are posted *during* application where the public may come in contact with pesticides. The sign, however, only has to remain until pesticides have dried.
- For multiple family residences, notice must be provided at least *48 hours* prior to proposed date of application. This notice is given to each occupied unit to be treated.
- Any person who contracts for pesticide applications must receive in writing the following information: proposed date of application, pesticide to be used, label instructions relating to safety and a Consumer Information Sheet which contains the telephone number of the applicator, as well as telephone numbers of the NJ Dept. of Health for general health information and the NJ Poison Information and Education System for emergencies.
- In addition, no *aerial* application of pesticides can take place within *300 feet* of schools, hospitals, nursing homes, houses of worship if the premise or building is occupied by people. No *aerial* application of pesticides can take place within *100 feet* of any private residence unless written consent of the inhabitant is given.
- Most pesticide applications *cannot* be made in or around a school in grades preschool through 12 during normal school hours. After normal school hours, applications can only be made in areas where students will not make contact with treated areas until the pesticide has dried or settled.
- The pesticide, diazinon, responsible for many bird deaths cannot be applied to sod farms, golf courses or other turf areas greater than 3 acres (or to other areas less than 3 acres if frequented by waterfowl).

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TESTIMONY OF RICK HIND

ENVIRONMENTAL PROGRAM DIRECTOR

U.S. PUBLIC INTERTEST RESEARCH GROUP

THE FAILURE OF FEDERAL PESTICIDE POLICY

OCTOBER 10, 1989

U.S. PIRG 215 Pennsylvania Avenue, S.E. Washington, D.C. 20003 (202) 546-9707

Printed on 100% recycled paper.

Mr. Chairman and distinguished members of the Committee, I want to thank you for inviting me to testify today on the critical issue of pesticides and the widespread health threats posed by the chemicals Rachel Carson referred to as "elixirs of death." The U.S. Public Interest Research Group (U.S. PIRG) is a national research and advocacy organization that serves as the national lobbying office for state PIRGs, such as New Jersey PIRG, across the country. Together PIRGs have more than a million members nationwide.

In spite of congressional action on a wide range of laws to protect public health and the environment over the last 20 years, today virtually every American is exposed in some way to the use of approximately 2.6 billion pounds of pesticides a year. Unlike most other toxic chemicals, pesticides, are legally dispersed in the environment and on our food.

One of the most repugnant aspects of this problem was best amplified recently by a study done by the Natural Resources Defense Council (NRDC), "Intolerable Risk: Pesticides in our Children's Food." The NRDC report brought much needed attention to the additional risks pesticides pose to children. Infants and small children are proportionately exposed to much higher doses of pesticides, relative to their body weight and food consumption patterns than adults. In an infant's first year of life his or her meals may legally contain hundreds of different pesticides, many of which are carcinogens. Even if children breast feed, studies done for the Environmental Protection Agency (EPA) have shown that most children will be exposed to several toxic chemicals in mother's milk, including the persistent DDT metabolite known as DDE -- 17 years after DDT was banned for most uses! The children of farmers and farmworkers face additional food and non-food exposures (and risks) to pesticides in their air and water.

While it is not likely that every American's daily diet will contain all of the 300 or more pesticides used on food, it is likely that many will be present on most foods and others have even be found in our water. It is just as frightening that our laws and government allow for such a menu of poison. Many of the older pesticides, still widely used, would probably not be allowed to enter the market if they were developed today. However, they remain on the market through loopholes in public health protection statutes created for them by Congress.

Today Americans have at least a one in four chance of contracting cancer and a one in five chance of dying from cancer, according to the Department of Health and Human Services (DHHS). The American Cancer Society estimates that one million new cases of cancer will be diagnosed this year. Yet we endure additional cancer risks from pesticides that begin with an infant's first meal. There should be zero tolerance of policies that risk additional cancers given the largely environmentally induced epidemic we are already experiencing. -- According to a DHHS report, "most scientists now consider that about one third to two thirds of all cancers are associated with the environment in which we live and work."

However, based on the EPA's announced policy of October 19, 1988, the Agency would like to proceed with a policy of "acceptable" risk in regulating pesticides. The implications for continuing a policy that allows cancer causing pesticides in food are major. It means we will continue to see decisions such as the Alar (daminozide) and captan fiascoes which unnecessarily extend the use of carcinogens in the food supply and the environment. -- A recent study by the U.S. Public Interest Research Group (U.S. PIRG) found that at least 60 pesticides which the EPA believes may be carcinogenic are allowed on commonly eaten foods. The study reported that many of these foods, such as apples, beef, corn, tomatoes, peaches and milk, may legally contain 20 or more of these pesticides. Only 11 of these 60 pesticides are in EPA's Special Review process. The Agency seems determined to continue the use of most of these pesticides based on misleading or incomplete information from food and chemical companies.

Until the EPA can prove risk assessment to be more of an exact science than it is today, it should move to ban the sale and use of carcinogens immediately. These chemicals pose more than a risk to the food supply, they endanger people all along the stream of commerce, from production to application. It is unacceptable for the government to defend the use of a cancer causing agent given the paucity of scientific knowledge about that chemical's use, other chronic health effects, the formula's other ingredients, synergism with other companion pesticides and fertilizers and greater threat to sensitive groups such as infants and children.

All too often, the EPA gerrymanders its decisions about such matters by claiming (with no credibility) to have accurate dietary or pesticide use information that "reduces" the risks posed by a chemical. After nine years in Special Review, the EPA this year finally acted on captan. They banned its use on some foods but continued it on high volume foods such as grapes because of its "$1.2 million a year benefits" to the grape and wine industries.

The message is clear, we can no longer wait for agencies such as the EPA and the Food and Drug Administration (FDA) to protect public health and the environment from pesticides. Their recent statements that "the food supply is safe" after failing to suspend the use of Alar (daminozide) and captan on apples and other foods were the latest examples of a policy that pits human health and the environment against corporate profit statements.

Although Congress reauthorized the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) last year, the new law was accurately dubbed "FIFRA Light" in the media because it was so weak. The main improvements made in FIFRA include a 10 year time table to complete the retesting of approximately 600 active pesticide ingredients and the partial repeal of the indemnification and disposal obligations previously borne by the federal government. With the exception of the testing time table, the new law will not address many of the problems posed by pesticides today. For example,

even the new retesting deadlines fail to mandate comprehensive health testing for neurotoxic effects.

We must therefore act as consumers, as legislators and responsible food and agricultural producers to curb the use of these chemicals today if we are to avoid the "silent spring" that Rachel Carson so ominously predicted 27 years ago. It is time to realize that pesticides are the silent violence of chemicals and that we need a national policy to phase out their use and embrace non-polluting sustainable agricultural techniques.

FOOD SAFETY

While considerable attention has recently been paid to pesticides in food by the media, the focus has mainly been on Alar and its metabolite unsymmetrical dimethylhydrazine (UDMH) in apples. However, the problem is much broader than one carcinogen on one crop. In EPA's October 1988 policy statement on pesticides in food, the Agency said "there is at least 'limited evidence' of carcinogenicity (virtually all from animal studies) for 66 or more of the approximately 360 food-use pesticides already approved for use...EPA expects this number to become somewhat larger as it receives and evaluates more studies on the food-use pesticides."

In February of 1987, the EPA ranked pesticide exposures in food as its third most serious environmental health threat -- estimating a risk of 6,000 additional cancers per year. In May of 1987, the National Academy of Sciences (NAS) released a report analyzing the increased cancer risks posed by the use of pesticides on food. The NAS reported that, by volume, 90 percent of all fungicides, 60 percent of all herbicides and 30 percent of all insecticides may cause cancer. The report also reiterated that the EPA had only invoked the Delaney Clause of the Food Drug and Cosmetic Act (FDCA) three times to prohibit a pesticide from being used on a food commodity, (fosetyl al on hops, amitraz and permethrin on apples).

Many of the more hazardous pesticides are used on a wide variety of crops. For example, approximately one third of all vegetables and fruits, including apples, grown in the U.S. are treated with a group of fungicides known as ethylene bisdithiocarbamates (EBDCs). -- (Almost 35 times more widely used than Alar.) The EBDC fungicides include mancozeb, maneb, metiram and zineb. Through food processing, cooking, storage and digestion, EBDCs break down and concentrate into a carcinogenic metabolite known as ethylenethiourea (ETU). The EPA says that the "entire U.S. population is potentially subject to dietary exposure to ETU." After over 11 years in EPA's Special Review process, the Agency is expected to announce a decision to curtail some food uses of EBDCs but, predictably will not immediately suspend all uses.

In the case of Alar, Uniroyal has chosen to keep its product on the market 16 years after its metabolite (UDMH) was first found to be carcinogenic by the U.S. Air Force and now insists that it is "only" used on 5 percent of the apple crop. However, the public has no way of knowing which apples are tainted, causing people to avoid all apples. If Uniroyal had acted responsibly and voluntarily pulled their product off the market years ago, the apple industry would not have faced such sudden losses. This was echoed last week as the Processed Apple Institute also urged the EPA to ban Alar due to slumping sales and consumer outcry. The manufacturers of EBDCs, DuPont, FMC and Rohm & Haas now have an opportunity to spare the growers, food stores and the public a similar ordeal. (DuPont already claims to be voluntarily phasing out CFCs in response to ozone depletion.) After all, chemical companies have enjoyed 20 to 30 years worth of profits from EBDC fungicides. They can well afford to give them up if they choose.

Clearly the resources of the EPA are wholly inadequate given EPA's enormous task of setting food safety limits (tolerances) on more than 8,000 food items for 300 to 400 ingredients in over 40,000 pesticide formulas. Similarly, allocations at the FDA to carry out its responsibility for monitoring and enforcement are as bad or worse. The combined pesticide program budgets ($40 million at EPA and $14 million at FDA) total less than two hours of spending at the Pentagon. Certainly the registration fees added to FIFRA last year need to be enhanced along with new monitoring fees to allow the FDA and the U.S. Department of Agriculture (USDA) to improve both their technological and personnel resources for monitoring and enforcement duties.

Along with greater resources, the agencies need to interpret the laws correctly or ask for the enactment of stronger laws. Currently, FIFRA and the FDCA are regarded within the regulated community as "industry friendly" statutes. Pesticides are automatically assumed to have benefits which the EPA usually interprets to out-weigh health risks. Dr. John Moore at the EPA was quoted on CBS's "Sixty Minutes" as saying that the law does not allow him to quickly remove pesticides such as Alar from the market. By opting only for "cancellation" rather than "suspension", the EPA will allow Alar to remain on the market for another 18 months, or longer, while lenghty cancellation proceedures against Uniroyal begin. However, this is not necessary, the EPA does have the power to suspend Alar effective this week if they agree that it represents an "imminent hazard."

While the EPA agrees that Alar residues on apples do represent unreasonable risks, which exceed one cancer in a million, the Agency chooses not to consider a cancer risk to children to be an "imminent hazard." The EPA estimates that Alar puts 9 children in a million at risk over the next 18 months. A recent Congressional Research Service (CRS) report commented that the difference of opinion between NRDC and the EPA on pesticides in food is more "an indication of the difficulty of conducting risk assessments, as well as a reflection of legitimate scientific disagreements."

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Balancing health risks against economic benefits further clouds any effort to assess risks. Because Alar's "benefits" are largely cosmetic, the moral unacceptability of risk-benefit analysis is self evident. However, because Alar's metabolite UDMH may be present in elevated levels in processed food, the EPA could invoke the risk only provision of the FDCA (the Delaney Clause) which gives the Agency authority to revoke or disallow a food tolerance for any carcinogen whose residues concentrate in processed food.

The 1987 NAS report summarized other exceptions that the EPA has made to the risk only Delaney Clause. The insecticide permethrin, a possible carcinogen, concentrates 230-fold in processed tomatoes. Instead of banning its use on all tomatoes the EPA restricted its tomato uses to "Tomatoes Grown in Florida for Final Marketing as Fresh Tomatoes." Given the status of monitoring by the FDA, this policy presents some serious enforcement questions. -- No wonder the Grocery Manufacturers of America (GMA) are pushing federal legislation to allow the EPA to preempt the right of states like California from setting more stringent food safety standards. They know that the EPA will not ban something until all hell breaks loose, as it did when a few states decided to crack down on ethylene dibromide (EDB) in 1984. Unfortunately, the GMA has forgotten that a safe food supply is in their interest, mediocre regulation is not.

Recently some local food chains led by Raley's of California, have broken away from this mentality and are having their food tested by private labs. -- In some cases these labs are doing a better job than the FDA. While this practice can be abused by unscrupulous retailers, those in the industry who are sincerely competing to sell organic foods or foods with fewer pesticide residues are at least headed in the right direction. The next step that the food industry can take is to establish organic food sections in their produce departments. Growth in this area could be one of the best ways American farmers could compete with foreign imports. Some chains have already required contracts from growers that stipulate no use of pesticides in Special Review. With only 11 of 60 or more possible carcinogens in Special Review, this is not as bold a step as it seems.

INADEQUATE REGULATION & CONTROL

Even with relatively small amounts of knowledge about the possible risks posed by pesticides, what we do know should call into question the level of use they now enjoy. It is irresponsible to prescribe the continued use of these poisons when so many factors are not fully taken into account by the EPA and FDA as they "regulate" pesticides for both food and non-food uses. The following are some of the well documented short-comings of our current national pesticide policy:

*** The EPA fails to govern its regulation of pesticides by the higher risks posed to sensitive subpopulations such as infants, children and pregnant women. The Agency also fails to

calculate total dietary exposures from all foods and all pesticides. They also use out-moded dietary data for different populations even when estimating individual pesticide exposure. The Agency still uses food consumption information collected in the 1960s which assumes that average adults consume no more than 7.5 ounces per year of melon, eggplant, avocados and other foods. The NRDC estimated that children eat six times more apples than the EPA assumes. This example illustrates the absolute absurdity of EPA's tolerance levels for food because millions of Americans today eat far larger amounts of these foods. Congress should pay particular attention to this major weakness in EPA's underlying assumptions. Even the Agency's most recent dietary survey data used in its Tolerance Assessment System (TAS) is more than ten years old. Congress should demand to know how the Agency can regulate with such poor data and why more current data is not a basic requirement in their calculations.

*** An October 1986 report (RCED-87-7) by the General Accounting Office (GAO) revealed that the FDA is not adequately monitoring pesticides residues in food. The GAO found that the FDA's pesticide monitoring cannot detect 60 percent of the pesticide likely to appear on food. It further found that the undetected pesticides are often among the most dangerous ones. Some of these include Alar, EBDCs, and their metabolites UDMH & ETU, for which the FDA tested only 125 and 76 separate samples respectively between 1979 and 1985. The FDA's tests also do not detect alachlor, the most widely used herbicide in the U.S.

The GAO also found that the FDA was monitoring less than one percent of domestic food and only slightly more of imported food. Even when the FDA found violations, it failed to invoke sanctions against violators. The GAO found that the FDA also lacked resources to do an adequate job of monitoring. For example, the FDA only allocated $13.7 million for monitoring pesticides on all domestic and imported food in 1985.

*** Another study by the GAO released on May 3 of this year reported that the EPA program to monitor the export of banned or unregistered pesticides, estimated at about 100 million pounds a year is nonexistent. "EPA received notices on only about 26 percent of the exported products" according to the GAO. This means that the countries from whom we receive as much as 25 percent of our fresh fruit and vegetables may not be getting proper warning and use information about the hazards of these banned and unregistered pesticides.

*** Only 9 states require comprehensive data on the use of an estimated 1.6 billion pounds of pesticides on crops each year in the U.S. The states are: California, Connecticut, Kansas, Maine, Massachusetts, New Hampshire, New Jersey, New York and Texas. If the FDA had better information on pesticide use in the other 41 states, they would know better what they were monitoring for and it would be

much less expensive to do so. More accurate use information would also help the EPA to more accurately consider exposure as well.

*** While approximately 400 out of 600 pesticide active ingredients are allowed on food, only 195 have been issued new "registration standards" by the EPA (and according to the Agency only two pesticides, metolachlor and fosetyl-al, have been fully tested). EPA officials have also been hinting that they may not meet the new FIFRA reregistration time tables for lack of funding. And none of the 1,200 so-called inert ingredients used on any of more then 40,000 pesticide formulations are required by statute to be tested or regulated based on their health effects. The EPA began requesting test data on 110 inerts in 1987 but the Agency does not consider the added risks posed by these companion chemicals when regulating an active ingredient. Many, such as asbestos fibers, benzene, chloroform, formaldehyde and methylene chloride are known carcinogens.

*** The EPA also fails to calculate the added risk of exposure to other pesticide active ingredients that are likely to be on the same foods. For example, Alar is weighed by the EPA separately from the Agency's regulation of captan which is also used on apples. -- While the EPA considered other fungicidal risks and alternatives to captan it did not consider risks posed by other pesticides allowed on the same food such as Alar (a cosmetic growth regulator) or lead arsenate (an insecticide).

In this regard the Agency also fails to calculate or require data on the cumulative or synergistic effects of exposure to food-use pesticides and fertilizers likely to be used and found together. This is now done, to some extent, with pharmaceutical products but is not yet part of the EPA's current risk assessments. A well known example of synergistic health effects is the 53 fold risk of lung cancer to cigarette smokers who are also exposed to asbestos.

*** Multiple exposures to pesticides through all foods, drinking water and the air (toxic fog) are not currently factored into the EPA's regulation of pesticides. A June 1987 USDA study reported that the ground water supply of 50 million rural Americans is at risk of contamination from pesticides used in agriculture. The EPA reported in December of 1988 that 77 pesticides have been found in the well water of 39 states. In October the Agency said that it would like to begin considering drinking water exposures when regulating pesticides in food but has yet to do so. And while the EPA suspects that 127 pesticides may leach into ground water, only six active ingredients are currently regulated under the Safe Drinking Water Act, 17 more were proposed by the Agency on May 2.

*** Most pesticide food tolerances were set in the 50s and 60s and reflect a "margin of safety" that errs on the side of the food

grower not the consumer. Too often these tolerances were set high enough to insure that no one was caught violating them, instead of low enough to insure food safety. To now say that actual residues are usually below these tolerances is comparable to saying that few people are violating a 150 mile per hour speed limit. A March CRS report said "Current detection technology can routinely indicate residues in the parts per trillion...Most of the tolerances for these pesticides were presumably first granted when the state of the art detection method could only identify the pesticide in the part per million range."

*** The EPA is only sporadically requiring testing on neurotoxic health effects of pesticides. They especially lack requirements for neurotoxic behavioral effects as a routine test for each chemical. Another area of concern with little activity at EPA is the effects of pesticides on the body's immune system.

*** Some pesticides such as heptachlor, toxaphene and silvex are no longer legally used on food but their residues are still allowed until they work their way out of the food chain. However, because a pesticide is no longer legally used on food does not mean that illegal use is also not a problem. There have been several well publicized incidents of illegal use of pesticides. In March of this year heptachlor tainted feed forced the destruction of four hundred thousand chickens in Arkansas and in 1985 aldicarb was found to have been illegally used on watermelons and cucumbers in California and the northwest. Only now is the Agency moving to further restrict the sale of heptachlor. However, illegal use is not restricted to this country. Another GAO report (RCED 86-219) released in September of 1986 also found poor monitoring and enforcement buy the FDA of illegal pesticide residues on imported food.

Because there is no known safe level of exposure to carcinogens, the EPA in the past has attempted to establish theoretic "de minimis" or "negligible" risk exposure levels that are used to justify permissible levels of cancer causing pesticides in food and water. Having never fully factored in the missing risk variables mentioned above it is easy to see why there is so little consensus on the pseudo-science of risk assessment as it is currently practiced at the EPA and the FDA.

GROUND WATER

Nearly half of the U.S. population relies on ground water for drinking. This includes virtually all of the rural population of the U.S. A June USDA report estimated that 767 counties in spanning every region have a combination of vulnerable ground water and moderate to high pesticide use.

Based on over 100 studies, the EPA in December issued a report

on pesticides in well water. Of the 77 pesticides they said were found in the well water of 39 states, 33 were carcinogens. The report represented sampling from approximately 45,000 of the nation's 13 million wells. Pesticides were found in 11,000 wells and over 5,000 well samples exceeded health advisory levels. The EPA is in the process of conducting a one time survey of pesticides in ground water. They are testing wells for 127 suspected leaching pesticides.

In Florida, more than a thousand wells were condemned because of contamination from EDB. In Iowa, officials estimate that more than 25 percent of the population using public water supplies receives water containing pesticides. A survey done last year by the state of Minnesota found pesticide contamination in 33 percent of the 500 wells tested in 51 counties.

Dangerous pesticides such as aldicarb, alachlor and atrazine have now been found in every region. Little if any national monitoring is being done. For the most part, the EPA relies on the states for the information. Some data is generated by pesticide registrants but much more is needed.

Current EPA policy is based on EPA's "Agricultural Chemicals in Ground Water Strategy" announced last February. This proposal has been roundly criticized by environmental groups for relying too heavily upon states to regulate; for allowing certain areas of ground water to be written off as pollution sinks; for using cost based clean up standards instead of health based standards; and for defining the ground water to be protected too narrowly. Some state governments have called the EPA strategy unworkable.

While many states claim to have ground water protection programs or plans, only a hand full of states, such as Iowa and Minnesota are leading the country in identifying their problem and proposing strong measures such as source controls to prevent contamination. However, EPA's current strategy could hardly be called leadership. Instead it appears to follow rather than lead, in effect following the slowest states.

Last July, the Environment and Public Works Committee of the U.S. Senate reported out a ground water safety bill that would have made a number of important improvements had it become law. It also would have let farmers escape clean up liability from pesticide contamination of ground water. -- Although in doing so the Committee had the wisdom to transfer liability to the chemical manufacturer. It also would have given farmers an incentive to keep records of pesticide use and required pesticide manufacturers to pay for more monitoring and the replacement of contaminated water supplies.

The legislative solution to protect ground water from pesticides may best be sought by addressing all ground water pollution sources such as fertilizers and industrial solvents together. Ground water is the last vast unprotected resource that

calls out for comprehensive legislation with an emphasis on prevention. Once ground water is contaminated it can take decades if not centuries to be cleaned and as the Superfund program has taught us, it is very costly. Prevention through strict source controls is the only way.

FARMWORKERS

According to the DHHS, there are an estimated 3 million migrant and seasonal farmworkers in the U.S. They are the people who harvest our food and yet they are directly exposed to the highest doses of pesticide poisons most often. Thousands of farmworker children are put at additional risk by their proximity to fields and other exposures, legal and illegal. A study done for the National Cancer Institute found that farmers exposed to herbicides were six times more likely to develop non-Hodgkins lymphoma (a form of cancer) than the general population.

Last June the EPA proposed new farmworker safety practices. Dr. Marion Moses of the United Farm Workers (UFW) called the proposal a "grower protection standard...the regulations are disgraceful, very weak, timid." Not surprisingly, the National Council of Agricultural Employers commended the proposal as "thoughtful...thorough." Even the EPA's Science Advisory Panel criticized the plan saying it "does not go far enough in protecting farmworkers." They noted that California and Texas have already adopted stronger standards and added that the "philosophy of establishing only minimum standards seems inappropriate." Again, lack of resources is an additional problem. The EPA has less than 6 full time staff working on farmworker protection regulations.

Meanwhile, according to a report by the World resources Institute an estimated 313,000 farmworkers suffer from pesticide related illnesses each year. These health effects include acute poisonings but also can include birth defects, learning disabilities, hyperactivity and seizures.

In December of 1987 we joined with many other groups in supporting the UFW call for a national boycott of California table grapes. One of the main reasons for the boycott and central demands of the union is a ban on five of the most dangerous pesticides used on grapes. These include: captan, parathion, phosdrin, dinoseb and methyl bromide. The boycott can also give the UFW the bargaining power it needs to force greater compliance with health protection provisions of the stronger but unenforced California farm labor laws.

SUGGESTIONS FOR THE STATES, EPA AND CONGRESS

*** States should begin to institute more programs that go beyond the enforcement responsibilities delegated by the federal statutes and government regulators. States laws such as the California 1984 Birth Defects Prevention Act that require additional regulation and testing of pesticide manufacturers need to be

replicated in othter states. A bill introduced this year in the Califronia Assembly (AB 417) would phase out the use of cancer-causing pesticides. And Iowa and Texas have also recently enacted good legislation to protect groundwater and farmworkers respectively.

*** Immediately begin a program to ban carcinogens from the market and seize or order the destruction of existing stocks of banned pesticides, such as heptachlor, which are still used or allowed on food.

*** Oppose any attempt by special interest groups to preempt the right of states to regulate pesticides more stringently than the federal government. All other major environmental statutes allow for the wisdom of the states to lead the way if they choose. -- If a federal statute is really protective of public health, there will be no reason for states to challenge it.

*** The EPA should be required to use the greater risks posed y pesticides to sensitive population groups, such as infants, children and farmworkers, to govern its regulation of pesticides.

*** The EPA should be required to use accurate up to date dietary information when calculating exposures.

*** The EPA should calculate the added risk of exposure to pesticide inerts, metabolites, other likely used pesticides and fertilizers and their cumulative or synergistic health effects when assessing the risks of pesticide exposure. This calculation should include all routes of exposure to pesticides in the diet as well as drinking water, air, farmworker exposure, garden, home exposure etc. in determining the full body burden of pesticides and their health risks to the population as a whole.

*** Manufacturers of pesticides should not be allowed to continue their registration or food tolerance unless they have provided the EPA and FDA with practical and usable methods of monitoring for their pesticides.

*** The EPA should require pesticide manufacturers to test for more health effects, such as neurotoxic behavioral effects, with special attention given to the potential for learning disabilities and other effects on children.

*** Pesticide should not be used unless the user or applicator is willing to supply federal and/or local government with accurate records of its use.

There are many other proposals on the table in Washington and around the country, these are just some of the obvious ones. Thank you again for your attention to this important issue.

COALITION AGAINST TOXICS

223 Park Avenue
Atco, New Jersey 08004

10 October 1989

Testimony in Support of S-3741, Amendments To the Pesticide Control Act of 1971, sponsored by Senator Raymond Lesniak and Senator J. D'Amico

Senator Lesniak, Committee Members, and Staff:

Thank you for holding a public hearing before the Labor, Industry and Professions Committee on S-3741.

My name is Wynne Falkowski and I am Chairman of Coalition Against Toxics, a grass roots citizens group which works specifically to reduce pesticide exposure to people and the environment in New Jersey. While recognizing the right of farmers and the pesticide industry to do business in New Jersey, we nevertheless uphold the right of citizens to live in a safe environment and to be able to avoid pesticide exposure whenever possible. The proposed legislation will help make that choice possible.

There is one immediate step the legislature can take to reduce exposure to broad spectrum chemical pesticides such as carbaryl (Sevin) and diflubenzuron(Dimilin) and that is a restriction on aerial spraying of toxic substances over residential areas for gypsy moth control. The restriction would not apply to the use of target specific pesticides such as the biological control for gypsy moths, Bacillus thuringensis (B.t.). There is precedence for such restrictions in the Province of Ontario, Canada, and in the State of Connecticut. There is also a precedent for the use of safer alternatives right here in N.J. in the municipality in which I live, Evesham Township, and in Monmouth County. There is not a single state or federal program for gypsy moth control using Sevin anymore. For the past five years, the Department of Agriculture and the Department of Environmental Protection have used only Bt. in their aerial spray gypsy moth control programs.

Every year there are cases of citizen complaints about exposure of children to the spray while waiting for school buses in the morning. Since exposure incidents are nearly impossible to prevent in a residential area, it is imperative that the least toxic alternative be used in aerial spray programs. Our group feels that low flying aircraft over residential areas is in itself inherently dangerous, but when you add the extra risk of gallons of pesticide on board the aircraft, the risk increases substantially.

In the proposed legislation, restrictions will be placed on aerial spraying for gypsy moth that basically reflect the policies that DOA and DEP are already implementing.: first, use the least toxic alternative, BT. Secondly, aerially spray only when the gypsy moth population level reaches a damage level, as determined by the Departmentof Agriculture. The gypsy moth permit system proposed in the bill would insure that unecessary and/or duplicative aerial spraying would not occur. A similar permit program exists in DEP for aquatic pesticide applications, and we think that aerial spray programs over residential areas pose a significant enough exposure that a permit program should be in place. Is there a major use of chemical pesticides over residential areas in NJ, even though the DOA and DEP are using Bt. in their suppression programs? The most recent statistics show that in 1987, while Bt. was clearly in the lead with 78,939 acres aerially sprayed for gypsy moth, nevertheless 62,449 acres were sprayed with Sevin, and 2,582 with Dimilin. (This represents a swing toward the least toxic alternative, Bt., since 1980 when virtually no town was using BT. and the DOA was offering **only** Sevin for gypsy moth programs.) While we are pleased with the direction of the change, it is clear that a considerable amount of chemical spraying continues, often unnecessarily. It is estimated that in the town of Evesham, three tons of chemical pesticide were eliminated from being introduced into our environment since the ordinance was enacted in 1984. /68X

Please support the aerial ban of chemical pesticides over residential areas and the gypsy moth permitting program. Where a safe, least toxic alternative exists and has proven satisfactory over the years, why are we needlessly exposed to more toxic pesticides than we need to be?

There is another part of the bill I'd like to comment on, and that is the certification of commercial applicators. IT is critical that persons applying pesticides for money in public places, homes, schools, restaurants, etc. be fully licensed and certified. A summer employee, a part timer making a first diagnosis of a pesticide problem on his own, has the potential to cause a serious contamination problem if he misdiagnoses the problem or doesn't apply the pesticide at a proper rate. IN addition, that employee may not be fully aware of emergency actions to take in case of a pesticide poisoning incident. Consumers expect that when a pest control operator is hired, that that person is competent and knowledgeable and has attained some level of expertise.

We have no problem with a lesser trained person working alongside a fully certified applicator, when that fully certified applicator is physically present, , but as the DEP regulation reads now, "under direct supervision" is defined as the commercial applicator being " in contact with, not necessarily physically present". As a Registered Professional Nurse I would jeopardize my license if I were to instruct a nurse's aid under my supervision to administer so much as an aspirin. Pesticides, like drugs, must be dispensed with care. Would NJ applicators be at a competitive disadvantage if they had to be tested and licensed by the state? Twelve other states already have all applicators tested and certified by the state: Arizona,Connecticut,Indiana, Illinois, Iowa, Kentucky, Massachusetts, Minnesota, New Mexico, Tennessee,Utah,Wisconsin. It is time that NJ followed suit.

We support the Department's desire to register structural pest inspectors in order to protect the public from untrained or unscrupulous inspectors.

In conclusion I would like to share with you my reasons for being here to testify in favor of this bill. If this bill had been a law I would not have experienced the following unnecessary exposures:

* aerial application of carbaryl over my home despite requesting to be excluded from the privately contracted program

* ground application of carbaryl while in my first trimester of pregnancy - not notified by neighbor

* ground application of unknown pesticide by farmer which entered car

*aerial application of unknown pesticide for mosquito control at Island Beach State Park

*indoor application of unknown pesticide at Haagen-Daas ice cream store

*repeated intrusions of lawn service applications onto my property

As a medical professional I have seen and read about the increased incidences of late onset (over 30) allergies/sensitivities to chemicals in general. It is believed that this is caused by the cumulative chronic exposure to chemicals in everyday life. When this bill becomes law you will have the satisfaction of knowing that you contributed towards eliminating that exposure.

Wynne Falkowski, R.N.

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MUNICIPAL PESTICIDE ORDINANCES: MODELS FOR COMMISSIONS

The following ordinance was adopted by the Evesham Township council in September 1984, after a two-year "testing period." Although it is more restrictive than the state regulations, it has been reviewed by the Attorney General's office and approved by the state Department of Environmental Protection. Described by Evesham environmental commission members as a "model" and "the toughest regulations in the state on spraying pesticides in non-agricultural, residential areas," the ordinance prohibits the use of chemical pesticides and transfers enforcement responsibility from the state to the municipality.

A more lenient model ordinance was developed for municipal use in 1982 by the Bureau of Pesticide Control Operations, N.J. Department of Environmental Protection (CN 027, Trenton, N.J. 08025, 1-609-292-8393).

TOWNSHIP OF EVESHAM
ORDINANCE NO. 29-9-84

AN ORDINANCE OF THE TOWNSHIP OF EVESHAM AMENDING ORDINANCE NO. 7-2-83 TO REGULATE THE AERIAL SPRAYING OF PESTICIDES IN THE TOWNSHIP OF EVESHAM

WHEREAS, the Township Council of the Township of Evesham has determined that aerial spraying of pesticides for non-agricultural use has resulted in the dispensing of said pesticides on unknowing and unwilling property owners and residents in the Township of Evesham in contravention of their legitimate interests; and

WHEREAS, the Township Council has further determined that control of aerial spraying for non-agricultural use may limit human exposure, prevent contamination of surface and ground water and prevent contamination of fish and wildlife habitats.

NOW, THEREFORE, BE IT ORDAINED, by the Township Council of the Township of Evesham, County of Burlington, State of New Jersey, as follows:

SECTION 1. Definitions

For the purposes of application and enforcement of this Ordinance, the following words and phrases shall be defined as indicated:

(a) "Person" means and shall include corporations, companies, associations, societies, firms, and partnerships as well as individuals.

(b) "Pesticide" means and includes any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substances or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator; provided, that the term "pesticide" shall not include any substance or mixture of substances which the EPA does not consider to be a pesticide.

(c) "Pest" means: (a) any insect, rodent, nematode, fungus, or weed; or, (b) any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other micro-organism (except viruses, bacteria or other micro-organisms on or in living man or other animals) which is injurious to health or the environment.

(d) "Toxic" means poisonous or capable of causing acute or chronic injury to living organisms.

(e) "Microbial Insecticides:" Preparations based on disease organisms which normally cause insect diseases. (See Bacillus thuringiensis; Milky Disease Spores.)

(f) "Non-Agricultural Use" means use of a property, which property has not been assessed as "farmland" by the Township Tax Assessor and/or is used for purposes other than the production of an agricultural commodity.

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(g) "Agricultural Commodity" means any plant or part thereof or animal product produced by a person (including farmers, rangers, vinyardists, plant propagators, Christmas-tree growers, aquaculturists, floriculturists, orchardists, foresters or other comparable person) primarily for sale, consumption, propagation or other use by man or animal.

SECTION 2.

Any person engaged in aerial spraying of pesticides over lands located in Evesham Township must register with the Evesham Township Manager, or his designee, at least seven (7) days before the anticipated date of spraying operations; such registration shall include accurate information regarding:

(a) the pesticide to be sprayed; a copy of the label to be filed with the Township Clerk;

(b) the area, by lot and block numbers, to be sprayed;

(c) the aircraft (by registration number, model and general description) to be used in the spraying;

(d) the identity of the pilot of the aircraft and his pesticide applicator license number;

(e) the dates and times when the spraying is to take place;

(f) name and address and telephone number of the person making the application for registration;

(g) name and address of the insurance carrier insuring the aircraft and the policy number of a public liability and property damage insurance policy covering personal injury and property damage resulting from the spraying and operaton of the aircraft; said coverage shall meet or exceed the standards set forth below:

i. Bodily injury liability
   (1) $100,000 - each occurrence
   (2) $300,000 - aggregate

ii. Property damage liability
   (1) $50,000 - each occurrence

SECTION 3.

All aerial spraying operations must conform to existing Federal and State regulations. For example, no single engine planes are permitted at low altitudes over congested areas.

SECTION 4.

The aerial spraying of pesticides, other than microbial insecticides, for non-agricultural uses is specifically prohibited.

SECTION 5. Applicability

The provisions of this Ordinance shall not apply to County, State or Federal agencies.

SECTION 6. Penalty

Any person violating the provisions of this Ordinance (including, but not limited to, the registration requirements) and any person assisting or participating in an aircraft spraying operation resulting in the violation of this Ordinance, shall be subject to a fine of not more than $500.00 or imprisonment in the County Jail for not more than ninety (90) days, or both.

SECTION 7. Severance

Should any section, clause, provisions, or portion of this Ordinance be adjudged unconstitutional or invalid, such decision shall not affect or impair the validity of the remaining portions of this Ordinance.

SECTION 8. Effective Date

This Ordinance shall become effective twenty (20) days after its final passage and publication according to law.

SECTION 9..

All ordinances or parts of ordinances inconsistent with this ordinance are hereby repealed to the extent of such inconsistency.

Organizing for Action

Effective action by environmental commissions and citizen groups requires good organization. Enforcement problems, Superfund cleanups, applications for open space acquisition, site plan review — whatever the issue, you must know what you are talking about and be organized in your efforts.

The following guidelines were developed by Lewis Goldshore, Esq. and James Lanard, Esq. as part of ANJEC's workshop program on environmental enforcement (Spring 1984).

- Get involved in the issue early.
- Get the facts straight. Do your "homework."
- Get the group organized.
- Show strength and depth.
- Put everything in writing.
- Keep accurate records and files.
- Use photos and videotapes.
- Be persistent.
- Spend money for technical help and testimony.
- Know your limitations. Be good at what you do. Forget the rest.
- Work with local and state officials. Cooperate or co-opt.
- Work with the press.
- Make your public officials accountable — or run for election yourself.

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1987 GYPSY MOTH SPRAY PROGRAM

COMPOUND	ACRES TREATED*
SEVIN	62,449
DIMILIN	2,582
B.t.	78,939
OTHER	156

* RESULTS FROM 20 OF 21 REG. AERIAL BUSINESS

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BOARD OF CHOSEN FREEHOLDERS
OF THE COUNTY OF BURLINGTON
MOUNT HOLLY, NEW JERSEY
08060

January 28, 1983

OFFICE OF
BURLINGTON COUNTY
HEALTH DEPARTMENT
Telephone 267-0631
Area Code 609

TO: Municipal Clerk

FROM: Walter Trommelen

RE: 1983 Gypsy Moth Control Program

It is my understanding that municipalities have been sent information from the New Jersey Department of Agriculture, regarding OPTIONS for the 1983 Gypsy Moth Control Program.

We respect the various factors involved in deciding whether to spray, and if so, in which areas and whether to select either of the chemical pesticides (i.e., Sevin or Dylox), or B.t. (Baccillillus thuringiensis), a bacterial pesticide. We understand also, the lesser technical assistance being offered by the New Jersey Department of Agriculture for 1983.

If you select the option to spray, we wish to point out an advantage of the B.t. method; i.e., B.t. is not known to be toxic. Conversely, chemical pesticides are toxic in nature. Unfortunately, there are unanswered questions about long-term health effects of exposure to chemical pesticides like Sevin or Dylox.

While the cost for B.t. is greater, only one application is needed now, thus reducing the greater cost differential experienced in previous years.

We also look forward to the State Pesticide Council completing its work on a Model Municipal Ordinance, addressing spraying procedures on private properties. We hereby encourage each municipality to consider such an ordinance, when available.

These recommendations are the result of concerns brought to our attention by the Coalition Against Toxics, our independent review of studies and expert opinions, and our professional judgement, coupled with the various concerns and complaints we receive from residents, as your agent.

For any municipality which may elect area-wide spraying of chemical pesticide in residential areas, we recommend a thorough public information effort to inform all residents in spray areas, of appropriate precautions, similar to our recommendations, as distributed last year. Even if B.t. is used, municipalities are required to notify the public of the particulars of your aerial spray program.

We shall review our precautionary recommendations from last year and distribute an update version during March of 1983--thus leaving you enough time to inform your citizens of appropriate precautionary measures.

cc: All Local Boards of Health

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STATE OF CONNECTICUT
DEPARTMENT OF HEALTH SERVICES
BUREAU OF HEALTH PROMOTION & DISEASE PREVENTION

March 18, 1983

David Copeland
36 Georgia Trail
Medford, NJ 08055

Dear Mr. Copeland:

Thank you for your request for additional information regarding our April, 1982 news release on carbaryl. Enclosed is a copy of our statement. The following background information may be helpful in understanding our decision to issue that warning.

Our state's Department of Environmental Protection regulates aerial applications of pesticides. At the time our statement was issued, they already prohibited aerial spraying of broad spectrum pesticides such as carbaryl near residential areas. Only Bacillus thuringiensis (Bt) is currently approved for aerial use over or near residential areas. Therefore, our target audience for the news release was primarily individual residents, landlords and/or municipalities contemplating ground spraying of ornamental trees and shubs either by commercial pesticide operators or via the do-it-yourself method.

Numerous complaints of symptoms, including some suggestive of cholinesterase inhibition, were observed following reported exposures to carbaryl during the gypsy moth season in 1981. This experience prompted a review of the toxic effects of carbaryl, especially in view of the anticipated heavy usage associated with the expected gypsy moth mania in 1982.

A major source of information for our review and evaluation was the EPA Decision Document on Carbaryl, evaluating its status as an RPAR candidate. The length of this document precludes its reproduction by our staff. If you wish to obtain a copy, I suggest you contact the nearest branch office of the EPA.

Our decision to recommend against the use of carbaryl was based on its known potential for causing immediate health problems if used improperly, uncertainties regarding long-term toxic effects (including mutagenesis, carcinogenesis, and teratogenesis) and the availability of a safer, more biologically selective alternative, Bt.

566-8166
[illegible] Street • Hartford, Connecticut 06106
An Equal Opportunity Employer

John E. Keys
Epidemiologist
Toxic Hazards Section

Alan J. Siniscalchi
Acting Chief
Toxic Hazards Section

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NATIONAL PESTICIDE SURVEY

Project Update February 1989

Health Advisory Summaries Available for NPS Pesticides

EPA has prepared Health Advisory Summaries for participants in the National Pesticide Survey and is also making them available to the general public. Health Advisory Summaries have been prepared for nitrates and the 55 NPS pesticides listed below. These substances are considered to have a high potential for reaching drinking water.

The Health Advisory Summaries describe possible health effects of these substances and suggest actions that may be taken by a well owner or community system operator to ensure a safe drinking water supply.

The one page summaries are written in non-technical language to provide clear and understandable information to survey participants and the general public. The summaries also describe the uses of each pesticide and sources of further information and assistance.

The summaries are based on longer, more technical Health Advisories, issued by EPA to assist federal, state, and local officials in responding to drinking water contamination. Health Advisories contain information on health risks and treatment technologies, and specify levels of chemical concentrations in water that are acceptable for drinking. These levels, based on human data or experimental animal studies, include a "margin of safety" that provides an additional level of protection.

Appropriate Health Advisory Summaries are being sent to well owners and operators for any pesticides found in their wells as a result of National Pesticide Survey sampling. The summaries are also being made available to federal, state, and local officials, and to industry, farm, and environmental groups for further distribution.

Information on how to obtain the Health Advisory Summaries or the full Health Advisories can be obtained by calling the Safe Drinking Water Hotline, 1-800-426-4791, toll-free, Monday thru Friday, 8:30 to 4:30 E.S.T. (In Washington, D.C., call 382-5533.)

LIST OF HEALTH ADVISORY SUMMARIES

- Acifluorfen
- Alachlor
- Aldicarb &
  - Aldicarb sulfone &
  - Aldicarb sulfoxide
- Ametryn
- Atrazine
- Baygon
- Bentazon
- Bromacil
- Butylate
- Carbaryl
- Carbofuran
- Carboxin
- Chloramben
- Chlordane
- Chlorothalonil
- Cyanazine
- Dalapon
- 2,4-D
- DBCP
- Diazinon
- Dicamba
- 1,2-Dichloropropane
- 1,3-Dichloropropene
- Dieldrin
- Dinoseb
- Diphenamid
- Disulfoton
- Diuron
- Endrin
- Ethylene dibromide
- Ethylene thiourea
- Fenamiphos
- Fluometuron
- Heptachlor &
  - Heptachlor epoxide
- Hexachlorobenzene
- Hexazinone
- Methomyl
- Methoxychlor
- Metolachlor
- Metribuzin
- Nitrate/Nitrite
- Oxamyl
- Pentachlorophenol
- Picloram
- Prometon
- Pronamide
- Propachlor
- Propazine
- Propham
- Simazine
- 2,4,5-T
- 2,4,5-TP (Silvex)
- Tebuthiuron
- Terbacil
- Terbufos
- Trifluralin

• Common lawn chemicals

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The Alliance For Environmental Concerns, Inc.

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STATEMENT ON SENATE BILL 3741

The Alliance for Environmental Concerns, Inc. is a not for profit organization representing through its association members a majority of the professional pesticide applicators in New Jersey as well as those whose livelihood is dependent upon the appropriate use of pesticides in New Jersey. A list of these association members is attached to these comments. As part of its mission the Alliance issues newsletters updating its members on regulations, legislation and educational information affecting pesticide use. The Alliance for Environmental Concerns was founded in 1981 to help address the complicated issues regarding pesticides in our state. The Alliance for Environmental Concerns is a grass roots lobbying organization interested in the appropriate regulation and legislation of pesticides.

The Alliance is opposed to NJ Senate Bill #3741 in its entirety. A detailed discussion of reasons for this position follows.

It has only been a few months since the DEP has published final regulations for the Pesticide Code. This revised code was developed through an extensive public discussion of the issues. The DEP is receiving excellent cooperation from the pesticide user industry in the execution phase of these new regulations. Rather than commit the industry and the regulatory agencies to a new law, it would be in the publics best interest to allow the new code to proceed. Senate Bill #3741 appears to be only a circumvention of the regulatory process that has worked so well in New Jersey. The DEP has not been derelict in its duties. The educational and cooperative efforts from our excellent State Extension service is working diligently to train and certify pesticide applicators. The current bill would throw all of this good work into a state of chaos.

In addition to the above general comments we have developed specific comments which demonstrate that the proposed bill would not be in the public interest.

Pge. 1 Section 6.a. Increased size, diversity and mission of the Pesticide Control Council. The bill expands membership of the council in three categories: scientists, non-pesticide users, and public interest advocates.

EXPANDED PESTICIDE CONTROL COUNCIL MEMBERSHIP:

The current mission of this nine member council is to advise the department of environmental protection in matters relating to the control, regulation and use of pesticides. The council is presently composed of scientists, a farmer, a professional applicator, and and others serving as Governor appointees. Since its mission is to advise on technical matters, we are opposed to the proposed expansion of the council.

The bill would substitute a toxicologist with an individual with "training and experience in toxicology". We would recommend that the council have a board certified toxicologist, but we don't need a state law to make this happen. The DEP has the authority to request this.

The bill would require an individual with training or experience in ecology. There are no boards of certification for an ecologist, therefore we would recommend that one of the governors appointees be an individual with a Ph.D. in Ecology and at least three years of professional experience in New Jersey. Again a state law is not needed to deal with this.

We believe that expanding the board to include a medical doctor and an groundwater hydrologist to the council is not necessary. There are literally hundreds of scientific specialities. The purpose of the board is to render advise. The board may at any time consult with experts or obtain expertise outside of its composition. In fact this has been a routine practice. Expansion of the board only serves to encumber it and make its advise less timely and therefore less useful.

Several of the proposed additions will hinder the efficiency of the council by the addition members whose mission is not consistent with the mission of the council. Included among these is the "organic farmer" appointee. Since organic farmers are by definition opposed to the use of pesticides without regard to safety or benefit, they hold views that are diametrically opposed to the mission of the Pesticide Control Council.

For the committees information (1) "organic" farmers represents less than 1 percent of the farming community in New Jersey. (2)."Organic Farmers" often hold unscientific opinions concerning pesticides. For example a number of the "biological" or "natural" pesticides advocated by "organic" farmers are not registered in New Jersey. Many of these "organic" farmers believe that these products are relatively harmless. Several of these natural products are more toxic than many commonly used synthetic pesticides. For

example, nicotine, contains a "DANGER" label and Rotenone is extremely toxic fish killer. (3) The bill does not specify or define what an "organic" farmer really is and to defer to "recognized organizations of organic farmers" is an abnegation of responsibility. (4). Organic farmers by definition have little or no experience with pesticides.

A committee with 14 members becomes a bureaucracy unto itself. The public at large is already adequately represented with the designates from the Commissioner of Health, Dean of Cook College and the Secretary of Agriculture. These individuals can provide valuable input to the council and to the DEP on how pesticides are used and the impact on their use of proposed regulations. Their presence on the council will help insure that regulatory activities take into account actual practices as well as the public interest.

Pge 4 Section 5: Certification Requirements

Any implementation of this section must take into account the fact that there is currently a limited number of certified applicators; that the bill permits only a minimal time frame to become certified; that there are a finite number of qualified trainers; and that different types of pesticide applications have different levels of available supervision. Therefore we oppose this approach to total certification as being unmanageable within current resources.

Given the importance of training and experience in the process leading to the certification of the pesticide applicator, the elimination of the already mandated training level, "Registered Operator" would seem to be contrary to the objective of promoting the safest possible use of pesticides. Registered Operators work only under the direct supervision of a certified applicator. The Registered Operator system has worked well for New Jersey and to dismantle it without prior demonstration of benefit appears capricious. Incremental improvements over the current system can be achieved without legislation.

If the immediate certification of all applicators were to be required, this would increase the cost of professionally applied pesticides throughout the state. Applications made to casinos, restaurants, hotels, public areas for mosquito and fly control etc. would all be more costly. More serious is that with increased cost, non-certified entirely unsupervised individuals may conduct , illegal and difficult to enforce "do-it-yourself" treatments which would present a greater threat to the public.

Pge.6. Section 7. Prohibition of Aerial applications

This limits by law the options available to control pests in a safe, economical, and effective manner. The decision to use one product over another in a local situation should not be made by the state law. These choices are best made based on local conditions and situations. There are areas of the state that cannot be reached by land including many of our more economically important tourist beach areas as well as some which include insect breeding areas. The procedures proposed in the bill for dealing with aerial applications on an emergency basis only would be difficult and expensive to address and could not be done so in a timely manner. In utilizing integrated pest management principles, the timeliness of the application is one of the most important factors in minimizing the use of pesticides and maximizing their benefit. The bill should not take on the challenge of legislating pesticide application techniques.

Pge. 6. Section 8. Establishment of notification zones and procedures for avoiding pesticide exposure.

Regulations that address this issue are already in place. They were the result of over two years of public meetings and were carefully drafted by the DEP. The proposed bill would create the need to redevelop the notification procedures and would consume resources that are sorely needed elsewhere within the DEP.

The concept of notification by mail, phone or personal service was addressed in the public hearings held during 1987 and 1988. It was rejected after being duly considered because it is totally unworkable. Local ordinances provide direct notification of individuals who wish to be notified in advance of pesticide applications. These individuals register with the local authority and professional applicators check this list prior to application. Posting of pesticide applied areas has just started in 1989. We urge that this approach be given enough time to determine its value as well as the best mechanism to achieve the desired results.

Pge. 8. Section 14. Reporting of Incidents

The bill requires that physicians and veterinarians report incidents of pesticide exposure to the Department of Health. The approach is too broad and if enforced with the language proposed would dilute valuable information with the unsubstantiated reports.

Pge.10. Section 19 - Civil Action for violation of the Act.

The right to sue for damages already exists under current law. The bill proposes that any violation, even those that have no substantiated damage related to it, would be subject to compensatory damages. The bill would permit any individual who has been exposed to pesticides resulting from a violation of this act could sue for damages. Exposure does not equate to damage. Simple exposure without damage provides no basis for a just claim of damages. Actual damage has to be shown in order to determine what compensatory award is to be made. The bill would only encourage frivolous law suits.

Violations are adequately dealt with through a system of fines and cancellation of applicator certification or business licenses. Where injury occurs the tort laws are more than adequate for injured parties to sue.

Pge. 11 Section 20 (K). DEP fees will reflect actual or projected expenses incurred by the department for registration, certification and permit fees.

Current funding sources for the DEP include fees, EPA grants, and State Treasury appropriations. To permit the DEP to cover state short falls in funding is abnegation of legislative responsibility. It permits a regulatory agency to "tax" its constituents for its actual or projected costs. The bill leaves no checks and balances and permits an easy abuse of power by the DEP. This approach to regulatory funding is unprecedented in any state for pesticide regulations.

The purpose of the DEP in pesticide regulations is serve the public benefit. Funding on an actual or projected basis is contrary to this purpose. (1) Actual costs for registration of minor use pesticides often critical for quality integrated pest management would be the first victim of this funding approach. Product registrations for these products would be dropped and their benefits lost to NJ farmers, pesticide applicators, and the public. (2). Certification training provides long term benefit to the public. If fewer applicators become certified because of the expense which is very likely to occur, their service fees will increase without additional benefit to the public. Fewer applicators means delays in pesticide application especially during emergencies and this is contrary to the principles of integrated pest management. Fewer applicators means less service to the public and increased risk of poor pest control in hospitals, casinos, restaurants and other industries critical to the economy of our state including urban landscapes, golf and other amenity areas.

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New Jersey State Library

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THE ALLIANCE FOR ENVIRONMENTAL CONCERNS

MEMBER ASSOCIATIONS

NJ ARBORIST ASSOCIATION

NJ NURSERY AND LANDSCAPE ASSOCIATION, INC.

NJ TURFGRASS ASSOCIATION

NJ CHRISTMAS TREE GROWERS ASSOCIATION

NJ CEMETERY ASSOCIATION

GOLF COURSE SUPERINTENDENTS ASSOCIATION OF NJ

NJ CHAPTER OF INTERNATIONAL SOCIETY OF ARBORICULTURE

NJ STATE FLORISTS' ASSOCIATION

NORTH JERSEY LANDSCAPE ASSOCIATION

NJ PEST CONTROL ASSOCIATION

BERGEN COUNTY LANDSCAPER CONTRACTORS ASSOCIATION

MONMOUTH COUNTY BOARD OF AGRICULTURE

ATLANTIC COUNTY BOARD OF AGRICULTURE

PASSAIC COUNTY BOARD OF AGRICULTURE

MORRIS COUNTY BOARD OF AGRICULTURE

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION

CHEMICAL INDUSTRY COUNCIL

TESTIMONY OF ANNE MASTRO, FOUNDER

PARENTS AGAINST PESTICIDE ABUSE

TO THE

SENATE LABOR,INDUSTRY AND PROFESSIONS COMMITTEE

IN SUPPORT OF

EXPANSION OF "PESTICIDE CONTROL ACT OF 1971,S-3741

OCTOBER 10,1989

Last March 60 Minutes aired a segment on the pesticide Al-Ar,and discussed the health effects related to the pesticide when heated. It told about the high risk of contracting cancer in pre-schoolers that consumed apple products where Al-ar had been used in harvesting. Unknown to me ,my 6 year old son Joshua was also watching and after it was over asked me " will I get cancer?". You see I had been sending him to school with all natural apple juice and apple sauce. I thought I was being such a good caring mother, and all this time I had been giving him rocket fuel,which is what Al-ar becomes when heated. So this 6 year old had put 2+2 together,and come up with a deadly conclusion. I quickly told him no and proceeded to get very angry. The next day I must have made 50 phone calls all around the country trying to find out what I could do about getting Al-ar off the market. Do you know what I found? I found that Al-ar is just the tip of the ice-berg. While Al-ar is used on just apples, it is not considered a pesticide. It is called a growth regulator,and in fact only one of possible carcinogenic chemicals used on the fruits and vegetables our children consume.

The National Resources Defense Council put out a report last February, with information regarding the extensive use of pesticides,and their effects on children. They found that between 5,500 and 6,200 of the current population of pre-schoolers may eventually get cancer soley as a result of their exposure to eight carcinogenic pesticides. These being; Daminozide, Captan, Ethylene thiourea (ETU), Chorothalonil,Folpet,Hexachlorobenzene,Mancozeb and UDMH(breakdown product of Al-ar). Out of the 300 pesticides able to be used on our produce, these are thought to be the most dangerous. The N.R.D.C.'s report went on to say that pre-schoolers have have the greater risk to pesticide residues because of the amount they consume relative to their body weight. Pre-schoolers consume six times more fruit, seven times more grapes and seven times more apple products relative to their body weight than adults.

When the E.P.A. set their standared for an acceptable risk of exposure to pesticide residues, they came up with one cancer per one million following a full lifetime of exposure. Thats really not bad unless you are the person who gets the "one cancer". What they have not done is study the effects on our children. No where is there information regarding a childs exposure to these pesticides. When the Food and Drug Administration did a food monitering program on detectable levels of pesticide residues, they found more than 50% had detectable levels. Again, the levels set were for adults not children. Did you know that 50% of our childs risk of getting cancer is incurred between the ages of birth to 6 years old,soley as a result to pesticide residues?

Because of this information, which I consider a very brief summary, Parents Against Pesticide Abuse was founded. That is also why I am attempting to write this testimony in hopes that you will try and help us to control the use or abuse of pesticides in New Jersey. Because there is no monitoring program of pesticides it is unknown how many people are having reactions and getting sick. There is no education of the public to the dangers surrounding the use of pesticides. Any garden center will sell you Diazinon for your lawn or garden, but did you know it can cause severe nervous system effects,and affects eyes and skin. Again based on adult testing and exposure. Have you ever used Malathion or Parathion? * Both can cause nervous system irregularities, while Parathion is considered to be a"possible human carcinogen", mutagen; extremley toxic; and cause eye effects in animals. All these can be bought over the counter with virtually no warning about the health effects stated above. I'm sure at time or another you yourselves have ,with a severe bug problem, decided to double the dosage,to really get rid of thosedarn pests. So if you experienced a headache or developed flu like symptoms there wouldn't have been anyone to contact to notify or to ask questions.

That is why this bill is so important to the people of New Jersey. With the expansion of the pesticide control council ,they will be able to set up a competent notification system,wich will document health related illnesses due to pesticide exposure. When this information is brought in and looked over, education can begin. It will also tell the committee who to notify when aerial spraying is being done. But the biggest reason we need this Council is for stricter regulation of these pesticides. That when they are registered,they are kept off the market untill all the proper testing is done. Too many pesticides are allowed to be used today without all the data required to date. Please see accompanied chart. We need to update all tests done and this time include our children. We need to promote organic farming and encourage Integrated Pest Managment to other farmers. We are the Garden State, and because of our great state,we

should be the forerunner in pesticide reform.

I therefore urge you to expand the Pesticide Control Act of 1971 in keeping with New Jersey's continuing efforts to clean up our enviroment for our children, for their future!

* Parathion is not able to be sold over the counter under law.

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TABLE 2

HEALTH EFFECTS THAT HAVE NOT BEEN ADEQUATELY ASSESSED FOR THE PESTICIDES EVALUATED IN NRDC'S STUDY

Chemical (Date of RS)	Health Effects for Which Data Are Missing or Inadequate	Due Date
Acephate (Sept., 1987)	chronic toxicity - 1 species	March, 1988
	reproductive toxicity - 1 species	Dec., 1990
Azinphos-methyl (Sept., 1986)	neurotoxicity - 1 test	Sept., 1987
	chronic toxicity - 1 species	Aug., 1991
	oncogenicity - 1 species	Aug., 1991
	teratogenicity - 2 species	Sept., 1988
	reproductive toxicity - 1 species	Sept., 1990
	mutagenicity - 1 test	Sept., 1987
	" - 1 test	April, 1987
Captan (March, 1986)	chronic toxicity - 1 species	March, 1989
	neurotoxicity - requirements not specified	
Carbaryl (May, 1984)	chronic toxicity - 1 species	April, 1986
	teratogenicity - 1 species	April, 1985
Chlorothalonil (Sept., 1984)	oncogenicity - 1 species	July, 1985
	teratogenicity - 1 species	no date specified
Chlorpyrifos (Sept., 1984)	chronic toxicity - 2 species	Oct., 1988
	oncogenicity - 2 species	Oct., 1988
	mutagenicity - 3 tests	March, 1985
Daminozide (June, 1984)	chronic toxicity - 1 species	Oct., 1988
	oncogenicity (UDMH) - 2 species:	
	"low dose"	July, 1989
	"high dose"	Jan., 1990
	teratogenicity - 1 species	June, 1985
	reproductive toxicity - 1 species	June, 1986
	mutagenicity - 1 test	Dec., 1984
Demeton (Feb., 1985)	neurotoxicity - 1 test	no date specified
	chronic toxicity[b]	
	oncogenicity[b]	
	teratogenicity - 2 species	no date specified
	reproductive toxicity[b]	
	mutagenicity - 2 tests	no date specified
Diazinon	No Registration Standard on file	
Dicloran	No Registration Standard on file	

Dimethoate (March, 1983)	chronic toxicity - 1 species	Nov., 1985
	oncogenicity - 2 species	Nov., 1984
	teratogenicity - 2 species	May, 1983
Disulfoton (Dec., 1984)	neurotoxicity - 1 test	June, 1985[c]
	chronic toxicity - 1 species	Jan., 1985
	oncogenicity - 1 species	Jan., 1985
	teratogenicity - 1 species	Dec., 1987
	reproductive toxicity - 1 species	Dec., 1987
	mutagenicity - 2 tests	Dec., 1987[d]
ETU	breakdown product of EBDCs, see Mancozeb	
Folpet (June, 1987)	chronic toxicity - 1 species	Sept., 1987[e]
	reproductive toxicity - 2 species	Sept., 1987[f]
	mutagenicity - 1 test	June, 1988
Malathion (Feb., 1988)	neurotoxicity - 1 test	Nov., 1988[g]
	chronic toxicity - 2 species	April, 1992
	oncogenicity - 2 species	April, 1992
	teratogenicity - 1 species	May, 1989
	reproductive toxicity - 1 species	May, 1991
	mutagenicity - 1 test	Nov., 1988
	" - 2 tests	Feb., 1989
Mancozeb (April, 1987)	chronic toxicity - 2 species	June, 1991
	oncogenicity - 2 species	June, 1991
	teratogenicity - 1 species	July, 1988
	reproductive toxicity - 1 species	July, 1990
	mutagenicity - 1 test	April, 1988
Mevinphos (March, 1988)	neurotoxicity - 1 test	June, 1988[h]
	chronic toxicity - 2 species	May, 1992
	oncogenicity - 2 species	May, 1992
	teratogenicity - 1 species	June, 1989
	reproductive toxicity - 1 species	June, 1991
	mutagenicity - 1 test	Dec., 1988
	" - 2 tests	March, 1989
Methamidiphos (Sept., 1982)	chronic toxicity - 1 species	Aug., 1984
	oncogenicity - 1 species	Jan., 1983
	teratogenicity - 1 species	Oct., 1982
	reproductive toxicity - 1 species	June, 1984
	mutagenicity - 2 tests	Feb., 1983
Methyl Parathion (Dec., 1986)	neurotoxicity - "acute"	Sept., 1987
	" - "subchronic"	March, 1988
	chronic toxicity - 2 species	Dec., 1988
	oncogenicity - 2 species:	
	rat	Sept., 1987
	mouse (upgrade one)	Dec., 1987
	teratogenicity - 2 species	Dec., 1988
	" - additional study	Feb., 1991

Monocrotophos (Sept., 1985)	oncogenicity - 1 species	Nov., 1989
	teratogenicity - 1 species	Dec., 1986
Omethoate	metabolite of Dimethoate, see Dimethoate	
Parathion (Dec., 1986)	neurotoxicity - 1 test	Sept., 1987
	oncogenicity - 1 species	Feb., 1990
	reproductive toxicity - 1 species	March, 1987
	mutagenicity - 3 tests	Sept., 1987
Permethrin	No Registration Standard on file	
UDMH	breakdown product of Daminozide, see Daminozide	

SOURCE: EPA, Guidance for the Reregistration of Manufacturing-Use and Certain End-Use Pesticide Products Containing Monocrotophos, 1985; EPA Guidance for the Reregistration of Pesticide Products Containing Demet 1985; EPA, Daminozide Pesticide Registration Standard and Guidance Document, 1984; EPA, Daminozide Pesticide Registration Standard, 1983; Guidance for the Reregistration of Manufacturing Use and Certain End-U Pesticide Products Containing Methamidiphos, 1982; data for all other pesticides were obtained from the EPA, Guidance for the Reregistration Pesticide Products Containing (the pesticide) as the Active Ingredient dates listed in the table.

[a]An additional 90-day subchronic neurotoxicity study is required i adverse effects are indicated (no date specified.)

[b]This data may be fulfilled by citing data on Disulfoton due to chemical structural similarities.

[c]An additional 90-day subchronic neurotoxicity test is required in December, 1985 if adverse effects are indicated.

[d]An additional "other mechanisms of mutagenicity" study is require contingent upon results of other tests.

[e]Unless results of a diet analysis and explanations of certain fin are found to be acceptable by this data, a second study will be requir July, 1991.

[f]Unless historical control data are submitted and found to be satisfactory (no date specified), a new study will be required by July 1991.

[g]An additional 90-day neurotoxicity study is required (no date specified) if neurotoxicity is indicated.

[h]An additional subchronic 90-day neurotoxicity study is required i June, 1989 if neurotoxicity is indicated.

TABLE 3

YEAR OF REGISTRATION, TYPES OF PESTICIDE, VOLUME OF USE, AND MAJOR CROP USES FOR PESTICIDES INCLUDED IN NRDC STUDY

	YEAR 1ST REGSTRTN	TYPE	VOLUME OF U.S. USE:	MAJOR CROP USES LBS ACTIVE INGRED/YEAR
1. Acephate	1972	Insecticide	1,900,000	citrus
2. Azinphos-methyl (Guthion)	1956	Insecticide	2,500,000	peaches, pome fruits
3. Captan	1951	Fungicide	10,000,000	apples, peache: almonds, seeds other fruits & vegetables
4. Carbaryl (Sevin)	1958	Insecticide	10,005,100**	citrus, fruit, nuts, fodder
5. Chlorothalonil (Bravo)	1966	Fungicide	7,586,628**	fruits, vegetables, peanuts
6. Chlorpyrifos (Dursban/Lorsban)	1965	Insecticide	7,023,190*	citrus, cor. fruit, grain, nuts, vegetabl:
7. Daminozide[a]	1963	Growth Regulator	875,000	apples, peanut:
8. Demeton	1955	Insecticide	165,000*	vegetables and orchard crops
9. Diazinon (special review)	1952	Insecticide	2,125,274**	fruits, nuts, livestock, lawr & turf
10. Dicloran (DCNA)	1961	Fungicide	355,000	peaches, plums cherries, grapes, other fruits and vegetables
11. Dimethoate	1963	Insecticide	1,453,000*	citrus, pome fruit, nuts, grapes, tomatoes & man:

Americans for Safe Food
Center for Science in the Public Interest
Washington, D.C. 20036

SOME CHEMICALS FOUND IN FOOD

CAPTAN -- a fungicide that causes cancer in lab animals ... used on various fruits, nuts, and vegetables including apples, peaches, almonds, strawberries, beans, peas, beets, carrots, corn, garlic, cabbage, lettuce, potatoes, kale, spinach, and broccoli ... has been found in oils, fats, and shortenings ... used in postharvest treatments for potatoes and fruit, sometimes in packing boxes ... used as a seed treatment on corn and soybeans ... toxic to fish, bees, earthworms, and birds.

PARATHION (ethyl parathion) -- an insecticide that causes birth defects in chicks and ducklings ... evidence suggests it could be carcinogenic in laboratory animals ... used on cotton, tobacco, and many fruit and vegetable crops ... banned in six other countries ... direct exposure extremely hazardous ... highly toxic to birds, bees, and other non-pest species.

DAMINOZIDE -- trade name Alar, manufactured by Uniroyal Co. ... applied as a plant-growth regulator to apple and other orchard crops (cherry, nectarine, peach, prune, pears, grapes) to increase the fruits' storage life, firmness, and coloring ... also approved for use on peanut crops ... systemic chemical penetrates the whole fruit and cannot be removed by washing or peeling ... causes cancer in laboratory animals ... a breakdown product (unsymmetrical dimethylhydrazine, UDMH) is an even more potent carcinogen.

CHLOROTHALONIL -- trade name Bravo ... a fungicide found to cause tumors in rats and mice ... used on various vegetables, fruits, and beans including tomatoes, onions, broccoli, cabbage, cantaloupe, carrots, cauliflower, celery, cucumber, lettuce, potatoes, and watermelon ... highly toxic to aquatic invertebrates.

Testimony
Senate Labor, Industry and Professions
Committee
October 10, 1989

Good morning. My name is Joan Diefenbach. I am Director of IMPACT for the New Jersey Council of Churches, (NJCC), an ecumenical organization comprised of sixteen member Protestant denominations.

The NJCC is here today to express its wholehearted support for Senator Lesniak's bill S-3741 which expands the scope of the "Pesticide Control Act of 1971". This springs from our long history of committment to issues involving both the safeguarding of N.J.'s environment and legislative protections for our state's farmworkers.

In New Jersey approximately four million pounds of pesticides are applied to crops annually. The list includes both known and suspected carcinogens whose use has been linked to various forms of cancer, birth defects, brain and nerve damage, respiratory and eye illnesses and more. Farmworkers are exposed to them on a daily basis. In addition, farmers and their families are not immune to these same risks.

Despite efforts at both the state and national level to protect farmworkers from physical abuse and economic exploitation, it is apparent that they are still suffering deprivations. Eventhough farmworkers are currently exposed to some

of our most dangerous chemicals in the form of pesticides, they none the less do not enjoy the protections afforded other workers under our state Right to Know law. This bill will give farmworkers the basic rights to know the chemical being applied, the safe reentry time and what vehicles to use to deal with contamination.

Farmworkers have been sprayed directly while working in the fields, they have been sprayed by airplanes and ordered into fields literally dripping with pesticides. We must afford protections to this extremely vulnerable segment of our population.

In addition much of the farm labor in New Jersey is done by people for whom English is a second language. This legislation addresses this concern by requiring that postings and information be printed in both Spanish and English.

Perhaps most importantly, the bill prevents recrimination to the farmworker for refusing to enter the field before minimum reentry time or exercising other rights under the act.

According to the National Safety Council, farm work is now ranked as the most dangerous U.S. occupation, ahead of both mining and construction. Surely the evidence compels us to act to protect both our own health and the health of farmworkers and farmers.

Finally, we support the inclusion of farmworkers on the expanded Pesticide Control Council. The Council already has representation from both farmers and pesticide manufacturers and we believe farmworker representation is a necessary component to the full functioning of this body.

While unarguably there are laws on the books designed to protect the rights of our farmworkers, we feel many are not stringent enough, not sufficiently defined, and inadequately enforced. We ask you to release S3741 today as a first step toward what we believe will be a significant step in curing these inequities.

Senate Labor, Industry and Professions Committee

Comments on New Jersey Senate, No. 3741

Prepared by Richard E. Sameth
State Government Affairs Coordinator
for
National Pest Control Association

October 10, 1989

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Introduction

My name is Richard E. Sameth. I am the State Government Affairs Coordinator for the National Pest Control Association, the national membership association of structural, general household, industrial and institutional pest control companies in the United States.

On behalf of the National Pest Control Association and its 2,400 member firms, I thank the Committee for this opportunity to comment on Senate, No. 3741.

1. Section 6.a. Expansion of the Pesticide Control Council.

As a former member of the Pesticide Control Council and its Chairman for over four years, I feel that increasing the size of the Council from nine members to fourteen members would make it less productive. The Pesticide Control Act of 1971 created the Council to be an advisory body "in matters relating to the control, regulation and use of pesticides." Past experience has shown that individual members who have technical competence on the control, regulation and use of pesticides are the ones that have made the greatest contribution to the Council and the Department. By adding an organic farmer who doesn't use pesticides or a member from a public interest group would dilute the Council's productivity.

In addition, I would recommend that the requirements for a toxicologist and ecologist be further defined.

2. Section 3. (New section) Annual Report.

When I was Chairman of the Council, every year a report was sent to the Commissioner's office summarizing our accomplishments and goals and objectives for the coming year. Making the report mandatory is an excellent idea. One suggestion is that the report should be sent to the Commissioner because the Council is accountable to the Commissioner. Certainly, the Governor and Legislature should have access to the report.

3. Section 4. (New section) Pesticide Technical Advisory Committee.

The Pesticide Technical Advisory Committee is a sound recommendation. In fact, the Bureau of Pesticide Control under the direction of Raymond Ferrarin, has already set up a similar committee. One word of caution is that the creation of the Pesticide Technical Advisory Committee does not minimize the importance of having technical competence on the Pesticide Control Council. Like the Department of Health and Department of Environmental Protection, the Department of Agriculture should also be represented by two members.

4. Section 5. (New section) Commercial Applicator Certification.

At the last Pesticide Control Council meeting, Raymond Ferrarin reported that under our two-tier certification process, there has been no discernible differences in the number or gravity of violations from the registered operators vs. the certified applicators.

The current two-tier system which is only a few years old is working well,

In states where mandatory certification has been implemented, it has created a system where certified applicators play musical chairs moving to the next firm who will pay more money for their license.

Currently, the Bureau has its hands full certifying the certified applicators on a timely basis. By adding the commercial operators, it would add substantially to this problem and significantly increase the cost of administering the program.

Many firms hire college students during the Summer months. By the time the state got around to certifying them, the Summer would be over.

Especially for smaller companies, and most pesticide applicators fall into this category, mandatory certification would require that a firm keep on its staff a spare certified applicator in case an individual applicator decides to leave. This results in increased cost of operations which would be passed on to the consumer.

In any field there are people who are very knowledgeable but don't take written tests well. Unless some alternative like oral exams is implemented, some very good applicators would lose their jobs.

My recommendation would be to further improve operator education programs by running more training classes at an increased number of locations.

5. Section 7. (New section) Aerial Application to Non-Agricultural Lands.

From a practical standpoint, there are many areas, e.g., marsh lands which breed mosquitoes, which cannot be treated from the ground. Requiring that all three Departments grant approval for a health or agricultural emergency could delay a timely application resulting in the use of more pesticides to bring a burgeoning insect population under control. The bottom line is that pesticide application techniques should not be legislated but be regulated by DEP.

6. Section 8. (New section) Notification.

DEP just implemented a notification procedure developed after over two years of meetings with applicator groups, environmentalists and holding public hearings. A substantial effort went into developing the current notification program. Let's give this program a chance to prove itself before attempting to revise it.

During the last public hearings held in 1988, the concept of notification by "mail, telephone or personal service" was addressed and determined that it was not workable.

7. Section 14. (New section) Reporting of Pesticide Exposure Incidents.

When I received DEP's investigations of reported pesticide exposure incidents, I found that in a significant number of cases that there was no foundation to the allegation and the file was closed. If every pesticide exposure incident was reported before being investigated, it would result in some very misleading statistics. Currently, the Bureau of Pesticide Control has established a direct channel of communications with the Department of Health for proven pesticide exposure incidents.

8. Section 19. (New section) Civil Action for Violation of P.L. 1971.

This section would permit a person to bring a civil action even if he/she suffered no damages to his/her person property. This seems totally unreasonable. Proven damages must be a requirement before a successful civil action can be achieved.

In addition, there is a constitutional violation as there is no right to trial by jury. One judge makes the entire finding whether he or she be sitting on Chancery Division or Law Division.

There is such a divergence of opinion as to what people interpret to be conduct which is wantonly reckless. No criteria, definition or standard has been established as to what constitutes wantonly reckless.

9. Section 21. 10 b. & d. Increase of Fines.

Increasing fines from $3,000 to $25,000 for each offense is unreasonable. A $3,000 fine catches the attention of any size structural pest control firm. If the proposed increase were put into effect, it would put many of our member firms out of business especially when multiple fines are currently levied against the firm and individuals for the same violation.

Thank you for providing the opportunity to share these comments with this Committee. If you have any questions, please don't hesitate to contact me at the office (201-515-0100).

cause for concern

RD #1, Box 570
Stewartsville, N. J.
08886

Testimony in Favor of S3741

Dear Senator Lesniak:

My name is Adele McIntosh. I am here to testify in support of S3741. I am the director of Cause For Concern, whose office is in Stewartsville, N. J.. It is a national organization with 500 members in this state. We are a coalition member of the New Jersey Environmental Federation and the National Coalition Against Misuse of Pesticides. We are dedicated to the improvement of environmental quality through consumer education. We educate people about the health and environmental hazards of consumer products and provide information on safe alternatives.

Through our extensive media and public speaking work, we get barraged with phone calls from people begging for safe alternatives to environmentally unsound products and approximatly 1/3 of the inquiries arein reference to pesticides use. We inform consumers that alternatives work - be it the control of termites, rodents, or pests on farmers crops.

We desperatly need pesticide reform. The public is starting to see that we are frightfully small minded in looking at one active ingredient at a time. We are exposed to thousands upon thousands of chemicals in a lifetime. The synergistic and cumulative efffects of these chemicals are not taken into account, nor are the inert ingredients (many of which are hazardous). We are bombarding our immune systems, bioaccumulating, and

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bioconcentrating these pesticides which the Environmental Protection Agency has even found in mother's breast milk.

While speaking recently at a Junior League meeting, the programs president told me of the death of her 100 lb. Golden Retriever from an exposure to a commercially applied chemical lawn spray. Another member reported that she had a severe reaction during which her throat began to close and she was rushed to a local emergency room from a similar exposure. We get call after call from people complaining of upper respiratory and eye irritation, head aches and nausea after pesticide applicators have told them it was safe to reenter a treated area.

The consumers with whom I'm in contact are horrified to learn that pesticide safety is as weak as it is not only in New Jersey, but nationally. This bill is a small step in the right direction.

The Pesticide Incidents Reporting Program will provide us with much needed data. Through its implementation, we will see the immediate toll that our chemical warfare on pests is taking by reporting accute attakcs on human and animal health. The long term health and environmental effects of synthetic chemical pesticides will be felt for years to come. That can't be said about the use of barriers, insecticidal soaps, beneficial insects, vaccums and other non toxic methods which are proven to be effective. This bill will begin to open the door towards our organizations goal of a transition to the use of alternatives

to pesticides.

Sincerely,

Adele McIntosh
Director

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NJTA
New Jersey Turfgrass Association
P.O. Box 231 • New Brunswick, New Jersey 08903

October 4, 1989

Senator Raymond Lesniak
651 Westfield Avenue
Elizabeth, N. J. 07208

Dear Senator Lesniak,

The New Jersey Turfgrass Association is comprised of lawn care operators, landscapers, sod farmers, golf course superintendents, cemetery superintendents, University turfgrass specialists, Municipal and school grounds care people. Our membership totals more than 600 at this time.

On behalf of the New Jersey Turfgrass Association I would like to offer these comments on your proposed legislation dealing with pesticides, (S3741).

1. Make-up of the Pesticide Control Council; We feel that there is a need to improve the scientific make-up of this council especially with a scientist well versed in the fate of pesticides. Your suggested council make-up is politically unable to make a positive decision regarding pesticides.

2. Technical Advisory Committee; This is just redundancy with the Pesticide Control Council.

3. Pesticide Applicators; It is our belief that standards should be raised for applicators and that there is a definite need for pesticide operators in our industry. This all should be addressed through regulation upgrade.

4. Aerial Spraying; The new legislation does little to address the needs of our industry in this regard. Improved regulations could benefit all parties.

5. Notification; Much has been done over the past few years in this area-if more notification is required then let it be handled through the regulatory process.

6. Right to Sue; Doesn't the public have this right at the present time?

7. Registration Fees; Any attempt to raise these fees will only drive needed chemicals off the market and/or increase the costs to the consumer.

8. Costs; How will the added requirements to the DEP be funded. There doesn't seem to be any funding provisions in this legislature.

We know that you realize how important chemicals are in today's quality of life. Pesticides are only one area in which chemicals have increased the health, safety and enjoyment of our lives. We agree with you that strong regulations are needed to protect us and our environment from abuses. However, we feel that upgrades should be done through present regulations not more legislation.

It might be more to the point for the legislature to provide more funds for researching the fate of pesticides as they relate to their varied use within our state. With good scientific data the DEP could make sound regulations based on fact not the perception expressed by many pesticide extremists.

Yours truly,

Robert Dickison

Robert Dickison
Governmental Relations Chairman

PUBLISHERS OF GREEN WORLD

201X

SA-LANTIC HEALTH SERVICES, INC.
879 TWELFTH STREET
HAMMONTON, NJ 08037

Testimony on New Jersey State Senate Bill No. 3741
P.L. 1971, c.176.
Prepared by Barbara Goetschius, Migrant Program Director
October 6, 1989

I am submitting the following testimony on behalf of Sa-Lantic Health Services, Inc., one of two federally funded community and migrant health centers in New Jersey. As a migrant health center, Sa-Lantic provides primary health care to migrant and seasonal farmworkers in Atlantic, Burlington, Camden, Gloucester, Salem, and parts of Cumberland County. Sa-Lantic maintains offices in Hammonton, Pleasantville, and Penns Grove. From late May through October medical visits are made to farm labor camps in collaboration with the Family Practice Program of the University of Medicine and Dentistry of New Jersey based in Camden.

In my testimony I will focus on those aspects of the bill which most directly impact on the services we as a health center, provide to farmworkers. Since its inception Sa-Lantic has worked to provide services appropriate to the needs of the farmworkers, including the identification, diagnosis, and management of pesticide poisoning. We have collaborated with the State Health Department's Occupational Health Program on several projects, including pesticide education, voluntary reporting of farmworker health incidents, and a study of red blood cell cholinesterase levels in farmworkers to identify possible exposure to organophosphates.

During the past several months much publicity has been given to the possible health effects on our children of pesticide residues in apple juice and fresh produce. The use of chemicals which were once touted as the saviours of American agriculture is now being questioned by people other than organic farmers and environmentalists. But, somehow in all the news releases and interviews on 60 Minutes, the farmworkers who pick and handle those fruits and vegetables have been forgotten. Yet these men, women, and children are exposed on a daily basis to the residues of the many different pesticides used on crops, often over a period of several years, or even a lifetime.

At this point in time nobody knows how many farmworkers in New Jersey, or anywhere else for that matter, have been exposed to pesticides during even the past year, how often the exposure occurred, or how severe the resultant poisoning was in all cases. Actually, at Sa-Lantic we only know about those cases we see, and correctly diagnose, in our own center. No statistics are kept by the state; there are no reporting requirements, and no training program is available to educate health care providers in the identification and management of pesticide poisoning.

Acute and mild to moderate pesticide poisoning may result in a wide range of symptoms from difficulty breathing, to eye and skin irritation, nausea, vomiting, abdominal cramps, diarrhea, blurred vision, muscle weakness, muscle tremors, excessive salivation, and headaches, to name a few. To anyone not familiar with the diagnosis of pesticide exposure, these symptoms could be caused by a number of illnesses, including the flu.

The problem of diagnosis is exacerbated by the fact that in many cases, the person exposed may not have any complaints or associate them with his or her work. In the case of mild or moderate exposure, symptoms of pesticide exposure may be overlooked when other urgent problems must also be treated.

Once pesticide exposure has been identified, it is important to know what pesticide the patient has been exposed to. Different pesticides cause different symptoms, have varying degrees of toxicity, and may interact differently with medications. In my experience it is rare for a farmworker to know what pesticide he or she has been exposed to. The patient's employer, who is generally out in the fields for the same working hours as the workers, is not always readily available by telephone to answer this important question. Thus, information which may have serious implications for the treatment and management of a pesticide poisoning may not be available to the examining physician.

Apart from the problems related to post-exposure case management, is the issue of prevention of future exposures. This requires multiple approaches. One is to make the application of pesticides safer, through re-entry times, restrictions on the methods, location, and timing of application, and education of applicators so that their exposure or errors in application do not occur.

A second way to prevent exposures is to educate farmworkers in pesticide safety and the possible health consequences of exposure, first aid measures, the location of health services, their rights, and how to obtain assistance from those agencies mandated to serve them.

A third way is to gather and examine data on existing exposure cases, determine if the regulations regarding the chemicals involved were followed, and put in place a mechanism to alter those regulations which provide insufficient protection from pesticide poisoning, even with adequate compliance.

No single approach is going to resolve all issues regarding prevention of exposure, but in combination with others can provide an effective exposure prevention program. Many of the ingredients for a comprehensive program already exist. New Jersey currently has an excellent pesticide program which combines education, application regulations, and enforcement. In addition, many pesticide safety education programs have been developed for farmworkers which can be used or adapted for use in New Jersey.

The missing elements, and those necessary to address issues regarding the identification and treatment of pesticide exposures have been addressed in Senate Bill No. 3741.

With this bill, New Jersey has the opportunity to improve protections from pesticide exposure and the ability of the medical care system to appropriately diagnose and treat patients who have been exposed. While some may feel that certain provisions place a burden on the farmer, we believe that the cooperation and collaboration of the public and private agencies also affected by the bill, will assist farm employers in complying with the new regulations. Sa-Lantic fully supports passage of this bill and would encourage others to do so.

Thank you for the opportunity to submit these comments to the Committee.

NEW JERSEY CEMETERY ASSOCIATION STATEMENT BEFORE THE SENATE LABOR, INDUSTRY AND PROFESSIONS COMMITTEE PUBLIC HEARING ON S-3741 WHICH EXPANDS THE SCOPE OF THE PESTICIDE CONTROL ACT OF 1971 OCTOBER 10, 1989

The New Jersey Cemetery Association represents nearly 200 nonprofit cemeteries statewide which range in size from one to 150 acres.

NJCA is deeply troubled by S-3741 because the proposal to expand licensing and increase notification requirements and its related costs could force many cemeterians to eliminate much of the weed and pest control component of their grounds maintenance programs.

Under current regulations, all cemeteries must utilize DEP-certified pesticide applicators who are often cemetery employees and, at times, the only cemetery staff. Sometimes a part-time or seasonal worker, classified as a pesticide operator, will help with the process--a practice which would be eliminated under S-3741. The category of commercial pesticide operator--supervised by the certified applicator--is essential to the cemetery whose pesticide applicator relies on such workers to help apply, for example, dandelion killer on the requisite narrow schedule. NJCA requests that language be added to section 5 on pages 4 and 5 that will allow this practice to continue.

Section 8, which requires the Departments of Environmental Protection, Agriculture and Health to establish notification zones will impose a costly, time-consuming procedure with little or no added benefit to our employees or neighbors. It also could create needless concern about regularly tested, market-approved substances. Existing regulations already protect the user and those who may become exposed by requiring that signs be posted in treated areas during and after the procedure.

Pesticides in cemeteries usually are applied to concentrated areas, do not drift in the wind and pose little ambient risk. To further limit potential risk, accepted practice is not to apply pesticides during high winds or soon after a heavy rain.

Printing and distributing neighborhood warning announcements will create unreasonable and wasteful expense--especially when weather forces a treatment to be rescheduled once, maybe twice and everyone must again be notified. The bill doesn't require that notices be sent via registered mail, but NJCA sees no alternative. Under S-3741, a cemetery which is questioned about its notification practices and found without such proof, could be in violation of the act and subject to fines of up to $25,000 a day.

Such warnings of these limited applications to nearby residents or businesses also will be extraordinarily time-consuming--especially in cemeteries of three or more acres with only one or two employees. Most cemeteries in New Jersey border residential areas. Some, only 200 feet beyond their property line, adjoin 200-family apartment complexes and dozens of private homes. Other cemeteries may not touch private property, but 50 feet across the street sit 100 private homes and a few businesses.

Regulations currently provide that neighbors who request notice must be contacted before trees are sprayed or other broadcast pesticides applied--a practical, cost-effective policy. Outside registered commercial applicators often are employed for application of such restricted use pesticides. Cemeteries must reschedule at the contractor's convenience, and if it is the following day, they will have no time to inform neighbors. NJCA hopes you will re-examine the burdensome notification proposal in this measure.

We appreciate the opportunity to offer our comments and stand ready to assist the committee.

STATEMENT OF

THE DEPARTMENT OF THE PUBLIC ADVOCATE

BEFORE THE SENATE LABOR, INDUSTRY

AND PROFESSIONS COMMITTEE

ON

SENATE BILL 3741

October 10, 1989

John P. Thurber
Division of Public
Interest Advocacy

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MR. CHAIRMAN AND MEMBERS OF THE LABOR, INDUSTRY AND PROFESSIONS COMMITTEE:

ON BEHALF OF ALFRED A. SLOCUM, THE PUBLIC ADVOCATE OF THE STATE OF NEW JERSEY, I AM APPEARING TO PRESENT OUR DEPARTMENT'S VIEWS ON THE CRITICAL ISSUE OF PESTICIDE CONTROL. SENATE BILL NO. 3741, SPONSORED BY SENATORS LESNIAK AND D'AMICO, WOULD PROVIDE THE STATUTORY MECHANISM TO REDUCE ENVIRONMENTAL, RESIDENTIAL AND AGRICULTURAL WORKPLACE EXPOSURE TO PESTICIDES AND WOULD MANDATE APPROPRIATE NOTIFICATION, TRAINING, REPORTING AND OTHER CRITICAL SAFEGUARDS IN THIS AREA.

IN RESPONSE TO COMPLAINTS FROM CITIZENS AND GROUPS ABOUT THE IMPROPER USE OF PESTICIDES AND INADEQUATE ENFORCEMENT OF EXISTING LAWS, THE PUBLIC ADVOCATE HAS PARTICIPATED IN A VARIETY OF PESTICIDE CONTROL EFFORTS DURING THE PAST FEW YEARS. THESE HAVE INCLUDED A CHALLENGE TO PESTICIDE CONTROL REGULATIONS PROMULGATED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP), COMMENTS AND SUGGESTIONS TO DEP TO IMPROVE ITS REGULATORY AND ENFORCEMENT EFFORTS IN THIS AREA, AND WORK WITH A VARIETY OF STATE AND NATIONAL ORGANIZATIONS TO DEVELOP MODEL PESTICIDE PROTECTIONS. BECAUSE THE PROPER REGULATION OF PESTICIDES IS A MATTER OF STATEWIDE CONCERN, THE PUBLIC ADVOCATE HAS SOUGHT TO REPRESENT THE BROAD PUBLIC INTEREST OF ALL NEW JERSEY CITIZENS WHOSE HEALTH AND WELFARE COULD BE ENDANGERED BY THE IMPROPER APPLICATION OF PESTICIDES.

WHILE WIDELY RELIED UPON BY FARM OWNERS AND OTHERS, THE USE OF PESTICIDES POSES A SUBSTANTIAL THREAT TO FARMWORKERS, THE GENERAL PUBLIC AND OUR ENVIRONMENT. NUMEROUS STUDIES HAVE CONFIRMED THAT PESTICIDES HAVE POLLUTED OUR WATERWAYS AND GROUNDWATER, CONTAMINATED MUCH OF OUR FOOD SUPPLY, CAUSED HEALTH DAMAGE TO AGRICULTURAL WORKERS AND APPLICATORS, AND CAUSED SERIOUS HARM TO THOSE WHO LIVE OR WORK IN AREAS IN WHICH PESTICIDES HAVE BEEN APPLIED.

THE ADVERSE EFFECTS OF EXPOSURE TO PESTICIDES ARE PARTICULARLY ACUTE IN NEW JERSEY. THOUSANDS OF POUNDS OF HIGHLY TOXIC PESTICIDES ARE USED THROUGHOUT THE STATE EVERY YEAR. INDEED, THE DEPARTMENT OF THE PUBLIC ADVOCATE REGULARLY RECEIVES COMPLAINTS FROM A WIDE RANGE OF CITIZENS WHO HAVE BEEN EXPOSED TO PESTICIDES. YOUNG CHILDREN HAVE BEEN SPRAYED WITH PESTICIDES WHILE PLAYING OUTSIDE, FAMILIES HAVE BEEN EXPOSED TO PESTICIDES WHILE ENJOYING A BACKYARD BARBECUE, AND THE ILL AND ELDERLY HAVE BEEN INADVERTENTLY EXPOSED. WE HAVE ALSO INVESTIGATED THE PARTICULARLY ADVERSE EFFECTS OF PESTICIDES ON FARMWORKERS.

OVER THE PAST FEW YEARS, THE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAS REVISED ITS PESTICIDE CONTROL CODE IN SEVERAL WAYS TO BETTER PROTECT THE PUBLIC, WORKERS AND THE ENVIRONMENT FROM TOXIC PESTICIDES. NEVERTHELESS, IN OUR VIEW, COMPREHENSIVE LEGISLATIVE ACTION IS ESSENTIAL TO BETTER ENSURE THAT FARMWORKERS, THE GENERAL PUBLIC, AND OUR ENVIRONMENT ARE SUFFICIENTLY PROTECTED FROM TOXIC PESTICIDES. BASED ON OUR

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New Jersey State Library

INVOLVEMENT IN THIS ISSUE, SUCH LEGISLATION SHOULD ADDRESS SEVERAL DISTINCT ISSUES. FIRST, THE AERIAL APPLICATION OF BROAD SPECTRUM CHEMICAL PESTICIDES ON NON-AGRICULTURAL LANDS SHOULD BE PROHIBITED EXCEPT UNDER EMERGENCY CONDITIONS AS CERTIFIED BY APPROPRIATE STATE AGENCIES. SECOND, EFFECTIVE NOTIFICATION PROCEDURES SHOULD BE ESTABLISHED TO AFFORD ALL PEOPLE WHO MAY BE EXPOSED TO PESTICIDES THE OPPORTUNITY TO AVOID SUCH EXPOSURE. THIRD, STRICT CERTIFICATION SHOULD BE REQUIRED FOR ALL COMMERCIAL PESTICIDE APPLICATORS. FOURTH, THE AGRICULTURAL USE OF PESTICIDES PRESENTS SEVERAL ADDITIONAL ISSUES. BASED ON OUR EXPERIENCE, THERE IS A COMPELLING NEED TO REQUIRE DISCLOSURE BY FARM OWNERS TO THEIR EMPLOYEES REGARDING ALL APPLICATIONS OF PESTICIDES, INCLUDING THE TYPE OF PESTICIDES APPLIED AND THE TIME WHEN IT IS SAFE TO REENTER THE FIELDS. FARM OWNERS SHOULD ALSO BE PROHIBITED FROM REQUIRING FARMWORKERS TO REENTER THE FIELDS BEFORE THIS MINIMUM SAFE REENTRY PERIOD HAS ELAPSED, AND THE RIGHT OF FARMWORKERS TO REFUSE SUCH UNSAFE REENTRY WITHOUT FEAR OF RETRIBUTION MUST BE ADEQUATELY PROTECTED. MOREOVER, APPROPRIATE PESTICIDE TRAINING FOR ALL FARMWORKERS SHOULD BE MANDATED, WITH UNDERSTANDABLE INSTRUCTIONAL MATERIALS BEING PROVIDED IN BOTH SPANISH AND ENGLISH. FIFTH, SPECIAL TRAINING SHOULD BE PROVIDED FOR HEALTH WORKERS IN THE RECOGNITION, EVALUATION AND TREATMENT OF PESTICIDE EXPOSURE. SIXTH, AN EFFECTIVE AND COMPREHENSIVE REPORTING SYSTEM SHOULD BE ESTABLISHED FOR ALL INCIDENTS OF PESTICIDE EXPOSURE. FINALLY, A PRIVATE CAUSE OF ACTION SHOULD BE EXPRESSLY PROVIDED SO THAT INDIVIDUAL CITIZENS MAY PURSUE LEGAL REMEDIES TO ENFORCE THE

PROVISIONS OF THE LEGISLATION -- AGAINST BOTH THE APPLICATORS OF PESTICIDES FOR THEIR VIOLATIONS, AS WELL AS AGAINST THE RESPONSIBLE STATE AGENCIES IF THEY HAVE FAILED TO CARRY OUT THEIR OBLIGATIONS UNDER THE STATUTE. SENATE BILL NO. 3741 ADDRESSES EACH OF THESE VITAL AREAS.

IT IS IMPORTANT TO NOTE THAT NEW JERSEY IS NOT ALONE IN ATTEMPTING TO REASONABLY CONTROL THE USE OF PESTICIDES IN THIS MANNER. MANY OTHER STATES ARE ALSO TAKING SIMILAR STEPS TO PROVIDE THIS VITAL PROTECTION FOR THEIR CITIZENS. RHODE ISLAND, CONNECTICUT, MASSACHUSETTS AND MARYLAND, TO NAME A FEW, HAVE ALL ACTED TO CONTROL THE APPLICATION AND USE OF PESTICIDES.

IN CONCLUSION, I WANT TO EMPHASIZE THE PUBLIC ADVOCATE'S VIEW THAT THERE IS A COMPELLING NEED FOR COMPREHENSIVE LEGISLATIVE ACTION TO PROTECT THE HEALTH AND SAFETY OF THE PUBLIC AND THE INTEGRITY OF OUR ENVIRONMENT FROM THE ADVERSE EFFECTS OF PESTICIDES.

THANK YOU.

NEW JERSEY FARM BUREAU
GARDEN STATE

168 West State St., Trenton, New Jersey, 08608 tel. (609) 393-7163

October 10, 1989

TESTIMONY
to
Senate Labor, Industry and Professions Committee
on
S-3741, amends Pesticide Control Act

Good morning, Mr. Chairman and members of the committee. We appreciate the chance to make a few remarks about the bill before the committee, which proposes a series of changes to the Pesticide Control Act. For your information, New Jersey Farm Bureau is the largest membership organization of farmers in the state. We represent over 5,300 members from all counties except Hudson. The majority of commercial farmers in the state belong to our organization, and it is our chief purpose to speak on their behalf on public policy issues affecting their interests.

Summary

In an overall context, we see the proposed bill in many respects as an evaluation of the present state pesticide control regulations (N.J.A.C. Title 7-Chap. 30, Subchapters 1-10). This evaluation deals with both the code's content and judgments made about safety issues therein, as well as whether the code is the best vehicle for implementing new concepts in the safe use of pesticides. This is particularly true in the instance of farm use of pesticides.

Agriculture Keeps New Jersey Green

Our view of the bill is that it contains a series of proposals that are largely redundant of points already covered in the state pesticide code, except where they differ in degree. In fact, some of the bill's provisions were discussed the last time the pesticide code was amended. A lot of things were debated then and some concrete changes were made- on prior notification for example. But other things were left aside that are being suggested again in this bill. We were not in favor of those items then nor are we now. There may be room for incremental changes in the state pesticide code-with regard to worker safety education program- but overall we see no need for this bill.

FARM EMPLOYEE SAFETY

The biggest concern we have about this bill deals with the various requirements for farm employers for disclosure and education programs. Let me make a few background comments about this before addressing the bill specifically.

We have seen public statements by the bill's proponents to the effect that "farmworkers need this bill to know what pesticides are used on a farm." We strongly dispute this for several reasons:

- any worker who is interested in this information can simply ask the farmer. We cannot understand why any farmer would refuse to do this, nor should any worker hesitate to initiate this request. Farmers are already in possession of information from the label of the pesticide container that can be readily shared with the employee.

- the pesticide code now already requires in section 9.13 entitled "farmworker safety" that workers shall be warned by the posting of a sign on a bulletin board at a point where workers gather for instructions. This notice includes a diagram of the fields and the material being used, and time of application.
- further, we believe the concepts of this bill won't be effective. We doubt very much whether Material Safety Data Sheets would mean anything to persons with a limited education. The training requirements in section 13 would also be limited in their effectiveness and very expensive to the farmer. We are not saying education should not be attempted, but this is not the best method. We have some ideas on this and would prefer to have it developed through the pesticide code-something which is already in place and has a proven track record.

We therefore believe that any worker who has ever wished to know about pesticides used on a farm already has several options available to him. We should also point out here that it is already a strict violation of both the label and the state pesticide code to expose any person-worker or otherwise-to wet spray, and there are re-entry intervals governing this as well.

In addition to subchapter 9 requirements of the state code, farmers are subject to federal regulations from three sources: the FIFRA law, EPA's farmworker standards which are currently being revised, and OSHA's Hazard Communications Standard. Each of these have their own provisions dealing with the safe use of pesticides in farm fields. Furthermore, DEP has two Spanish-speaking enforcement officers who conduct inspections

on both a random basis and in response to complaints of suspected violations. The available evidence from the compliance record of farmers with the rules is very good. Therefore, we conclude that there is little justification for this section of the bill.

Let me expand on this issue of worker safety on farms. If anyone has a risk of exposure to pesticides, it's the farmer himself. Generally it is he or a foreman who mixes, loads, and applies these materials - not field workers. He is the one who takes the major risk.

Yes, we are aware of the need for safety among all workers, and for the past several years we have been developing training materials of our own. (Show examples) We have also developed the position of labor ombudsman, which has been very successful. This person on our staff is bi-lingual and he goes onto a farm to visit with the farmer so that he is current on all the latest regulations - which is a pretty big job. Should there be a need, the ombudsman visits with the seasonal workers to surface any problems or answer any questions. The purpose of the program is to foster dialogue and to keep the workers abreast of accurate information pertaining to their employment. We recently obtained a slide presentation on worker safety and pesticides, and it seems to be well-received. We estimate that we have visited over half the labor camps in the state through this position since 1987.

The point here is effectiveness. If the employer and employees see a benefit to an education program, it will accomplish positive results. Putting the burden simply on the growers for the cost and implementation of the education programm in the manner prescribed by this bill will lead

to resentment and poor results.

OTHER COMMENTS

Our observations on the balance of the bill are as follows.

- COMPOSITION OF THE PESTICIDE CONTROL COUNCIL: (SEC.1)

  This would simply reconstruct the Council. There is no evidence that we know of which challenges the performance of the existing Council. They have been fair, and they have been responsive to all points of view. Their membership already includes representatives of groups who oppose most uses of pesticides, so they hear all sides of the question. Regarding other scientific expertise, the Departments of Environmental Protection and Health can avail themselves of such expertise already in their agencies should the need arise.

- PESTICIDE TECHNICAL ADVISORY COMMITTEE (SEC.4)

  The duties assigned to this committe are already vested with the EPA under the FIFRA and the FIFRA amendments of 1988. There is no need in our opinion for a duplication effort. The 1988 amendments are causing manufacturers not to bother with the further registration of many labelled uses (known as minor crop uses) because the cost of further testing relative to the sales volume of the product is not cost effective. New Jersey farmers will be heavily, adversely affected by this reregistration process which started in May. Another panel at the state level could lead to further problems and a non-competitive position relative to other states.

Testimony

- AERIAL SPRAY BAN (SEC.7); Although this does not apply to ag lands, the ban would cripple the businesses of those who do aerial application of farm fields. Without the availability of this service, farmers would lose a needed support service. This frequently leads to the demise of farming itself, as we have witnessed in the northern part of the state when equipment dealers have gone out of business.

- NOTIFICATION (Sec.8) Although non-specific, this section could be extremely burdensome to farmers. Current regulations prohibit any off-site drift. The state now has testing equipment to scrape samples from off-site structures and submit them for lab testing to determine if there was drift. This equipment is extremely sensitive and can pick up small traces. We continue to believe that notification should be a penalty where there is a pattern of drift violations, not as a prerequisite for all applicators.

- GYPSY MOTH PROGRAM (Sec.9): Where there is any finding that the Deparment of Agriculture has acted improperly or negligently to deserve the transfer.

- FARM EMPLOYEE NOTIFICATION Sec.10): As already stated, we think the provisions here should be set aside as being duplicative of other regulations. Where they are not, better methods can be devised.

- EMPLOYEE DISCHARGE (Sec. 17): This section is redundant of new "whistle blower" legislation and the federal Migrant and Seasonal Agricultural Worker Protection Act.

Testimony

- PENALTY SECTIONS AND PERMIT FEES (SEC. 19,20,21): In our opinion, these sections are unnecessarily punitive and not supported by the record of pesticide code compliance to date kept by the DEP.

Stephen J. George, President

Peter J. Furey, Administrator

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SENATE BILL NUMBER 3741

STATE OF NEW JERSEY

DATED: [illegible]

GENTLEMEN:

MY NAME IS ARMAND F. LE BAIGE AND I'M A RESIDENT OF BRADLEY BEACH, NEW JERSEY. I AM THE GOLF COURSE SUPERINTENDENT OF WHITE BEECHES GOLF AND COUNTRY CLUB IN LOWER ALLOWAY, NEW JERSEY. I AM ALSO THE VICE-PRESIDENT OF THE ALLIANCE OF ENVIRONMENTAL CONCERNS, INC. (A GRASS ROOTS PESTICIDE USERS GROUP); A MEMBER OF THE GOLF COURSE SUPERINTENDENTS ASSOCIATION OF NEW JERSEY; A MEMBER OF THE NEW JERSEY TURF GRASS ASSOCIATION; A MEMBER OF THE GOLF COURSE SUPERINTENDENTS ASSOCIATION OF AMERICA AND ONE OF THE NINE SUPERINTENDENTS OUT OF A MEMBERSHIP OF 9000 TO BE ELECTED TO BE ON THE SUPERINTENDENTS GOVERNMENT RELATIONS COMMITTEE; AND A LICENSED COMMERCIAL PESTICIDE APPLICATOR. GENTLEMEN, I HAVE BEEN APPLYING PESTICIDES ON GOLF COURSES FOR CLOSE TO 25 YEARS.

I FIRMLY BELIEVE THAT OUR REGULATORY AGENCY IN THE STATE OF NEW JERSEY HAS BEEN DOING AN EXCELLENT JOB IN IT'S REGULATION OF OUR INDUSTRY. REGULATION OF AN INDUSTRY AS COMPLEX AS OURS SHOULD BE BEST LEFT TO PEOPLE WHO DEAL WITH THE REGULATORY AGENCIES OF ALL 50 STATES. OUR D.E.P. MEETS ON A REGULAR BASIS WITH OTHER STATES REGULATORS IN ORDER TO CONSTANTLY BE ON THE LOOKOUT FOR WAYS TO MAKE THE SAFE USE OF NECESSARY CHEMICALS SAFER FOR THE CONSUMER AS WELL AS THE APPLICATOR. OUR STATE REGULATIONS HAVE JUST BEEN UPDATED AND WE THE USER OF THESE MATERIALS AND YOU AS THE USER OF THESE MATERIALS DO NOT SEEM TO HAVE ANY PROBLEMS WITH OUR RECENTLY UPDATED REGULATIONS. I BELIEVE THAT THIS BILL WOULD BE BURDENSOME AND WOULD DRIVE MANY FIRMS OUT OF BUSINESS OR DRIVE MANY PESTICIDE APPLICATORS TO NOT REGISTER THEIR BUSINESSES WITH THE STATE.

IT IS MY HOPE THAT THIS BILL WILL NEVER MAKE IT OUT OF COMMITTEE. IF IT DOES I BELIEVE THAT IT WILL RECEIVE OPPOSITION FROM EVERY URBAN AND AGRICULTURAL USER OF PESTICIDES IN THE STATE. BUT IF THIS BILL WERE TO PROCEED I WOULD LIKE TO COMMENT ON SEVERAL KEY POINTS:

PG. 1 SECTION 6.A.-----INCREASED SIZE, DIVERSITY AND MISSION OF THE PESTICIDE CONTROL COUNCIL.

IF THIS COMMITTEE IS EXPANDED TO INCLUDE A TOXICOLOGIST I WOULD RECOMMEND THAT ONLY A BOARD CERTIFIED TOXICOLOGIST BE APPOINTED.

AN ECOLOGIST WOULD HAVE TO BE AN INDIVIDUAL THAT HAS TRAINING AND EXPERIENCE IN ECOLOGY, POSSIBLY A PH.D.

I WOULD SUPPORT AN INTEGRATED PEST MANAGEMENT EXPERT OF WHICH NEW JERSEY HAS SEVERAL FINE INDIVIDUALS. ALSO I'M IN SUPPORT OF A MEDICAL [illegible] AND A REGISTERED GROUND WATER HYDROLOGIST.

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I DO NOT SUPPORT THE ADDITION OF ANY NONUSERS TO THE COUNCIL, SUCH AS AN ORGANIC FARMER. SEVERAL MATERIALS ORGANIC FARMERS USE ARE VERY POTENT AND ARE NATURAL CARCINOGENS.

I DO SUPPORT THE ADDITION OF A FARMER AND A PESTICIDE APPLICATOR.

I BELIEVE IN SAFE PESTICIDE APPLICATIONS AND I BELIEVE THAT ALL PESTICIDE APPLICATIONS SHOULD BE CONDUCTED BY A CERTIFIED PESTICIDE APPLICATOR. I BELIEVE THAT A PERSON SHOULD GO THROUGH EXTENSIVE ON THE JOB TRAINING BEFORE HE/SHE SHOULD BE ALLOWED TO ENTER THE EXAMINATION FOR CHEMICAL APPLICATION. THIS SHOULD BE DONE UNDER THE DIRECT SUPERVISION OF THE COMMERCIAL CHEMICAL APPLICATOR AND THE TIME FRAME FOR AN OPERATORS LICENSE SHOULD ONLY BE ONE MONTH.

PG.5 SECTION 7.------

AERIAL APPLICATIONS ON AGRICULTURAL AREAS ARE SOMETIMES NECESSARY DUE TO THE IN REMOTE LOCATION OF THE AREAS, SUCH AS ALONG OUR COASTLINES.

PG.6 SECTION 8.------

THIS REGULATION IS ALREADY IN PLACE AND WE ARE NOT HAVING ANY PROBLEMS WITH IT.

I SUGGEST THAT THE DEPARTMENT OF HEALTH AND THE D.E.P. DEVELOP A REPORTING SYSTEM THAT GATHER SUBSTANTIATED PESTICIDE EXPOSURE AND PUT THIS INFORMATION TO THE BEST USE OF ALL

PG.10 SECTION 19.----

THE RIGHT TO SUE FOR DAMAGES ALREADY EXISTS UNDER STATE LAW. EXPOSURE DOES NOT EQUATE TO DAMAGE. SIMPLE EXPOSURE WITHOUT DAMAGE PROVIDES NO BASIS FOR JUST CLAIM OF DAMAGES..ACTUAL DAMAGE HAS TO BE SHOWN IN ORDER TO DETERMINE WHAT COMPENSATORY AWARD IS TO BE MADE. THIS BILL WOULD PROVIDE THAT ANY INDIVIDUAL WHO HAS BEEN EXPOSED TO PESTICIDES RESULTING FROM A VIOLATION OF THIS ACT COULD SUE FOR DAMAGES.

PG.11 SECTION 20(K).---

I BELIEVE THAT THIS SECTION ON FUNDING TO COVER STATE SHORT FALLS AT THE MERCY OF THE STATES TAXPAYING BUSINESSMEN IS A MISUSE OF STATES POWER. IT PERMITS A REGULATORY AGENCY TO TAX IT USERS FOR ACTUAL OR PROJECTED COSTS.

SUMMARY:

I FIRMLY BELIEVE THAT OUR REGULATORY AGENCY IS DOING A FINE JOB WITH PESTICIDE REGULATION AND THIS BILL IS UNNECESSARY AND A WASTE OF OUR LEGISLATORS VALUABLE TIME

222X

THANK YOU,

Arnold H LeSage

ARNOLD H. LE SAGE
787 VALERIE PLACE
[illegible]

STATEMENT SUPPORTING AMENDMENT TO SECTION 8 OF S-3741

Federal law requires railroads to control vegetation. Specifically, 49 C.F.R. Section 213.37 states:

Vegetation on railroad property which is on or immediately adjacent to roadbed must be controlled so it does not . . .

(a) Become a fire hazard to track carrying structures;

(b) Obstruct visibility of railroad signs and signals;

(c) Interfere with railroad employees performing normal trackside duties;

(d) Prevent proper functioning of signal and communication lines; or

(e) Prevent railroad employees from visually inspecting moving equipment from their normal duty stations.

In addition to being required by law, vegetation control is necessary in order to ensure the safety of both the travelling public and railroad employees. Visibility hindrance at grade crossings presents a risk of collision with motor vehicles.

Also, vegetation control serves an aesthetic function in that it prevents an overgrowth of noxious weeds in urban and suburban areas. Weed control also reduces the number of week seeds which may adversely affect agricultural operations.

Conrail owns over 1,700 miles of track in the state of New Jersey. The application of herbicides is the only feasible means of weed control when that much property is involved. Conrail, and the railroad industry in general, contract with

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thoroughly qualified licensed applicators of herbicides who make appropriate use of the chemicals.

Light maintenance rates of herbicides are applied once a year. Obviously, Conrail's use of herbicides is negligible as compared to the average farmer's agricultural use of fertilizer, herbicides and insecticides. The typical farmer applies chemicals three or four times a year, and in much greater quantities than Conrail.

The Problem with Section 8

Existing law does not require advance notification of pesticide application, although DEP Regulation 7:30 - 9.8 does. Section 8 newly provides that the Department of Environmental Protection (hereafter "DEP") in consultation with the Departments of Agriculture and Health, shall, within one year, adopt regulations establishing notification zones and procedures. To the greatest extent practicable, notification shall be made directly by mail, telephone or personal service to persons within the notification zone. When direct notification is not feasible, other means shall be designed. Legal advertisements alone shall not constitute notice. "Notification zone" is not limited to a measured distance, but means that area within which persons may reasonably be expected to be exposed to a pesticide. DEP has not attempted to establish such zones by regulation.

Based on our past experience with DEP it may require first a general advance notification by mail and then a follow up specific notification 24 hours prior to the application by those requesting it by mail, telephone or by hand delivery.

(See proposed requirements contained in proposed SCS to S-1342 of September 14, 1984 attached hereto as Exhibit "A".)

We do not know who many, if not most, of the abutting residents are, along our right-of-way. It would be an enormously difficult, time consuming and expensive process to determine who lives within 200 or 500 feet of the railroad so that we might mail them the advance notification. In fact, we can with confidence predict that errors and oversights will occur. Our consequent inability to comply with the terms of this language will make this corporation subject to the penalty provisions of the law, should we proceed with chemical application.

Proposed Amendments

We request that railroads and other utilities which have extensive rights of way be permitted to provide advance notification of herbicide application by newspaper advertisement, to be followed by mail notification to those residents who request it.

A proposed amendment to Section 8 that will accomplish this is attached hereto as Exhibit B.

Respectfully submitted,

Augustus Nasmith

Augustus Nasmith
October 10, 1989

prior to the application. This notice shall include, in addition to any information required by the Department of Environmental Protection, the following:

Proposed time and date of pesticide application;

Brand name, United States Environmental Protection Agency product registration number, and the complete formulation of the pesticides to be used;

List of label precautions and known health effects not indicated on the label;

State Poison Control Center 800 Telephone Number;

EPA Pesticide Hotline Telephone Number;

Pest to be controlled; and

Alternative application dates in the event that the initially proposed application is postponed."

(2) Detailed information, described in subparagraph (1) of subsection d. of this section, provided as soon as practicable but not later than 24 hours prior to application by mail, telephone or hand delivery.

e. No gas, electric, telephone or other utility company or railroad licensed to do business in the State shall perform a pest control application except in accordance with the following procedure:

(1) A general notiification shall be mailed to persons residing within 500 feet of the target site in the case of a proposed aerial application or use of an airblast sprayer or 200 feet of the target site in the case of a proposed application with other ground-spraying equipment prior to the spray season of the calendar year in which the applications subject to notification will occur, worded as follows:

"Pesticides will be applied in the vicinity of your residence one or more times _____ to _____ in this calendar year. The following are possible pesticide products that may be utilized during these applications:

_____

(Common name and EPA registration number of pesticide or pesticide

These pesticides contain toxic substances and may cause adverse effects on man and the environment. For further information on these products, including but not limited to health and safety information, call the New Jersey 'Pesticide Hotline.'

If the application is performed either aerially or using an airblast sprayer, notification of persons residing within 500 feet of the target site is required, and within 200 feet in the case of other ground-spraying equipment. To request notification, send a letter with your name, address and telephone number to _____ by (name of the company) certified mail. Persons requesting notification will receive detailed information by mail, telephone, or hand delivery as soon as practicable but not later than 24 hours prior to the application. This notice shall include, in addition to any information required by the Department of Environmental Protection, the following:

Proposed time and date of the pesticide application;

Brand name, United States Environmental Protection Agency product registration number, and the complete formulation of the pesticides to be used;

List of label precautions and known health effects not indicated on the label;

State Poison Control Center 800 Telephone Number;

EPA Pesticide Hotline Telephone Number;

Pest to be controlled; and

Alternative application dates in the event that the initially proposed application is postponed."

(2) Detailed information, described in subparagraph (1) of subsection e. of this section, shall be provided as soon as practicable, but not later than 24 hours prior to application by mail or telephone or hand delivery.

f. No person shall perform an indoor pest control application except in accordance with the following procedure:

(1) In the case of private residences, a person occupying the residence shall be notified at least 24 hours prior to the application of the following:

Proposed time and date of pesticide application;

Brand name, United States Environmental Protection Agency product registration number, and the complete formulation of the pesticides to be used;

List of label precautions and known health effects not indicated on the label;

State Poison Control Center 800 Telephone Number;

EPA Pesticide Hotline Telephone Number;

Pest to be controlled; and

Alternative application dates in the event that the initially proposed application is postponed.

(2) In the case of rental units, a person occupying the residence receiving treatment, shall be notified by the landlord at least 24 hours prior to the application of the following:

Proposed time and date of pesticide application;

Brand name, United States Environmental Protection Agency product registration number, and the complete formulation of the pesticides to be used;

EXHIBIT B

Add at Page 7, Line 3

Gas, electric, telephone utilities and railroads may provide notification of pesticide application on their rights-of-way by newspaper advertisement, at least 14 days prior to the spray season of the calendar year, in a newspaper of general circulation in the municipality in which the application will be made, and by mail in advance of the application to those who request it by letter which provides their name and address.

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CAMDEN REGIONAL LEGAL SERVICES, INC.
FARM WORKER DIVISION
71 EAST COMMERCE STREET
BRIDGETON, NEW JERSEY 08302
PHONE (609) 691-4500 (609) 935-8047

October 10, 1989

Honorable Raymond Lesniak, Chairman
Senate Labor, Industry and Professions
Committee
State House Annex, CN-068
Trenton, New Jersey 08625

Re: TESTIMONY OF THE FARMWORKER DIVISION OF CAMDEN REGIONAL LEGAL SERVICES, INC., ON THE LESNIAK BILL S-3741 EXPANDING THE SCOPE OF THE PESTICIDE CONTROL ACT OF 1971

Honorable Chairman Lesniak and Members of the Committee:

The Farmworker Division of Camden Regional Legal Services, Inc. has served the legal needs of migrant and seasonal farmworkers in New Jersey for approximately twenty years. In our role as the legal services provider for this occupational group, we have repeatedly received complaints from farmworkers regarding pesticide exposure. The extensive experience of this office indicates that S-3741 needs to be passed to adequately protect farmworkers from pesticide exposure. This testimony is presented to the Committee at the request of a client who was sprayed by pesticides and then terminated after he filed complaints related to this exposure.

This testimony is submitted in conjunction and concurrence with the written testimony of the Migrant Legal Action Program. Our experience with farworkers in New Jersey has shown that current state and federal standards are inadequate, and that New Jersey should follow the example of Texas, Washington and California and adopt S-3741.

The experience of the Farmworker Division leads us to agree with findings of pesticide studies by the New Jersey Department of Health (NJDOH)[1] and Sa-Lantic Health Services[2], one of the farmworker public health clinics in New Jersey:

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[1] New Jersey Department of Health, Development of a Voluntary Reporting System for Agricultural Worker Health Incidents in Southern New Jersey, 1988.

[2] Lynne J. Steinberg, Sa-Lantic Health Services, Inc., Pesticide Report-1985, December 31, 1985.

(1) There is a substantial need for pesticide education and training for farmworker fieldworkers (NJDOH, p. 6, Sa-Lantic p. 16)

(2) There is a substantial amount of pesticide exposure among farmworker fieldworkers (NJDOH p. 9, Sa-Lantic p. 15)

(3) There is a substantial need for specific information about pesticides in the field to be given to farmworkers (Sa-Lantic p. 16, NJDOH p. 6)

(4) There is a substantial fear of retaliation among workers related to reporting pesticide problems which requires additional protections for such workers (NJDOH p. 10, Sa-Lantic p. 15)

Due to the above-listed concerns, the Farmworker Division of Camden Regional Legal Services, Inc. urges you to enact S-3741.

Respectfully Submitted,

CAMDEN REGIONAL LEGAL SERVICES, INC.
PATRICIA BOWEN ATKINS, DIRECTOR

BY: KEITH TALBOT, SENIOR ATTORNEY
FARMWORKER DIVISION

KT/cmc

ATLANTIC ELECTRIC

People Meeting Your Energy Needs

October 9, 1989

The Honorable Raymond Lesniak
24-52 Rahway Ave.
Elizabeth, New Jersey 07207

Dear Senator Lesniak:

As you know, S-3741 will receive public hearing tomorrow. I would like to provide the following comments for your consideration. The clear purpose of the bill is to provide additional controls for the use of pesticides and to provide protection for those persons who may, for whatever reason, come in contact with those pesticides. No one could argue that the intent behind the bill is commendable. However, there are some very important factors which have been overlooked in the drafting of the bill, and I wish to point them out before you consider this bill for passage.

First let me make a general observation by stating that agriculture applications of pesticides account for the vast majority of all pesticide applications in New Jersey. However, the proposed regulations appear to more significantly impact minority users of pesticides, such as businesses and industry.

Second, the existing regulations regarding the use of pesticides very clearly define and distinguish between commercial pesticide applicators and private pesticide applicators. We believe that the new language regarding applicators (as contained in section 5 of the proposed bill) is unclear and could be misinterpreted.

A third point we would ask you to consider is that we believe many of the new requirements proposed by the bill regarding applications, notifications to persons within application zones, etc., are already well-covered in existing regulations. The new regulations will create substantial paperwork and administrative nightmares. Particularly troublesome is the notification (and the methods of notification) to all persons "...expected to be exposed to a pesticide during and after its application...". We see substantial problems in accomplishing this. One example is that property owners are not always residents on their own property...it may be very difficult, if not impossible to identify all of the proper persons individually. The present method of accomplishing notification, through legal advertisements, has been very successful.

Atlantic City Electric Company
1199 Black Horse Pike
Pleasantville, N.J. 08232
609-645-4463

Capitol View Office Building
150 W. State Street
Trenton, N.J. 08618
609-393-4044, 393-0243

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A fourth point is that we are opposed to a forced stoppage of all aerial spraying. The potential resulting damage to our trees and property would be completely unacceptable in terms of damage to the environment as well as economic considerations.

Our last point concerns civil actions. We believe that the bill should contain language to indicate that the person bringing action should be required to show a preponderance of evidence. This is necessary to prevent a large number of frivolous lawsuits and complaints from being filed.

In closing let me say that we sincerely believe the existing regulations are sufficient to protect the public. However, we would be pleased to meet with you to discuss specific amendments to the language of the bill. Those amendments would be directed at clarifying language and lessening the impact to those applicators who minimally use pesticides for the protection of their property.

Sincerely,

R E Moeller

Richard E. Moeller
Senior Legislative Representative

rem:jw

cc: Honorable Christopher J. Jackman
Honorable Edward T. O'Connor, Jr.
Honorable Gerald Cardinale
Honorable Donald T. DiFrancesco
Mr. Dale Davis

NEW JERSEY
NURSERY & LANDSCAPE ASSOCIATION, INC.

Building A, Suite 3, 65 S. Main St., Pennington, NJ 08534 - 609/737-0890

SERVING THE NURSERY-LANDSCAPE-GARDEN CENTER INDUSTRY SINCE 1915

TESTIMONY ON SENATE BILL NUMBER 3741

SENATE COMMITTEE ON LABOR, INDUSTRY AND PROFESSIONS

October 10, 1989

The New Jersey Nursery & Landscape Association, Inc. was founded in 1915 and is currently comprised of over six-hundred (600) nursery, landscape and garden center firms throughout the Garden State. Annual gross revenues for the New Jersey nursery-landscape-garden center industry exceed three hundred million dollars ($300,000,000). The industry employs in excess of ten thousand full and part-time employees with an annual payroll of just over eighty-five million dollars ($85,000,000). As a result, the production of nursery crops and related services is the largest agricultural commodity in New Jersey.

The New Jersey Nursery & Landscape Association, Inc. supports scientific research which has been instrumental in, or holds the potential of, reducing the amount of pesticides used. Further, the Association encourages alternate insect and disease control methods. Moreover, the New Jersey Nursery & Landscape Association, Inc. supports initiatives that will assure the prudent use and application of pesticides.

Existing laws and accompanying regulations here in New Jersey, combined with existing federal statutes, contain adequate and sound provisions to control the use and application of pesticides. As a result it is the opinion of the New Jersey Nursery & Landscape Association, Inc. that any and all additional measures that may be necessary to further safeguard the use and application of pesticides can best be promulgated by amending existing regulations rather than by new or additional legislation.

The New Jersey Nursery & Landscape Association, Inc. expresses it's appreciation to the Senate Committee on Labor, Industry and Professions for the opportunity to submit these comments on Senate Bill Number 3741.

# # #

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ASSOCIATED EXECUTIVES OF MOSQUITO CONTROL WORK IN NEW JERSEY

STATEMENT ON SENATE BILL 3741

The New Jersey mosquito control community strongly opposes Senate Bill 3741. Under the provisions of this bill mosquito control could be reduced to minimal measures or, ironically, pesticide use might increase. That this bill could appear in one of the worst mosquito seasons in recent history is at the very least astonishing. Our astonishment at the bill is conditioned by our recognition that mosquito control is well on the way to being an endangered species. The stringent water management regulations of the New Jersey Department of Environmental Protection have forced many mosquito control agencies into a greater reliance on pesticides, an approach actually suggested by Department personnel. Of course, it is only fair to report that other Department personnel are telling us we should reduce our reliance on pesticides and further develop our historic reliance on an integrated pest management program.

The provisions of Section 5 permit pesticide application only by certified pesticide applicators. This restriction would eliminate the use of seasonal help for mosquito control during the summer months when mosquito production is most active. Without seasonal help there can only be more adult mosquitoes. One should note that all mosquito control personnel, both seasonal and full-time, receive annual training not only under the provisions of the "Pesticide Control Act" but also the "Worker and Community Right to Know Act".

There were some 175 seasonal positions budgeted for in 1989. There is no way mosquito control agencies could train these people for certification nor is there any way the Pesticide Control Program could test, grade and certify them in the same amount of time it takes to accomplish the double training incumbent on us presently. We cannot, being responsible to the taxpayers, have idle employees awaiting a license on our payrolls.

Section 7 bans the aerial application of broad-spectrum chemical insecticides over non-agricultural land "except in the case of mosquito control where the department determines that no practical alternative is available, or other health or agricultural emergencies." For adult mosquito control there is no narrow-spectrum insecticide; there is no alternative. There are times in the natural order of things when nature makes it possible for large broods of mosquitoes to emerge over areas so large and so inaccessible to ground equipment that aerial application is the only logical method of control.

The essence of any insect control program is timeliness. When large broods of mosquitoes appear, particularly in coastal areas, there is no time to get an approval for what is deemed an appropriate methodology. The prompt and precise application of insecticides is aimed at controlling mosquitoes before they disperse over wide areas. It is aimed at avoiding even greater use of insecticides which does not

make good sense economically or environmentally. Aerial application is a precise, effective means of control that allows mosquito control agencies to respond to the needs of their various constituencies, and I need hardly remind the members of this Committee that those needs are different.

The provisions of Section 8 on notification would mean that mosquito control agencies would be forced to abandon all adulticiding unless there were an emergency and the agency received a directive to spray from the New Jersey Department of Health. There is no fiscally responsible way that mosquito control agencies could provide the notification envisioned in this bill.

Decisions to spray are not made on a long-range basis because mosquito populations change as do the weather conditions that permit or prevent spraying for adult mosquito control--and there are guidelines indicating what are and are not appropriate conditions for spraying. To put mosquito control agencies in such a procrustean bed of notification could lead to planned spraying based on a schedule that had nothing to do with current mosquito populations. Scheduled spraying of this sort is anathema to any responsible agency.

Although disease is not generally a factor in planning mosquito control operations, its impact on the resort areas of New Jersey could be severe, and such a situation could be potentiated with the reduced control envisioned in this bill. As a result of the 1959 outbreak of eastern encephalitis in the coastal regions of New Jersey, it was estimated that the economic loss was between 4 and 10 million dollars. With the development that has taken place since 1959, one can imagine what the losses today would be. To be sure, the bill takes cognizance of health emergencies, but the reality is that by the time a health emergency is declared, people are seriously ill, dying or dead and that information has been spread by the media. One cannot see Atlantic City sitting still for the kind of beating that Lakewood suffered in 1959; the stakes are just too high.

The New Jersey mosquito control community would point out to the Committee that its activities are appropriately governed by the regulations of the New Jersey Pesticide Control Act, and we would suggest that mosquito control activities carried out under Chapter 9 of Title 26, N.J.S.A., be exempted from the provisions of Senate bill 3741.

In conclusion we find it a bitter irony to see such a bill appear in one of the worst mosquito seasons in some twenty years. Reports from the various county agencies around the State showed telephone calls requesting spraying for mosquito control were at record levels. Although these callers are a "silent majority" as far as hearings on this proposed bill are concerned, they were far from silent about wanting more spraying when they contacted us. We hope your concerns for these--unheard by you--thousands will be reflected in your deliberations on this bill which will in our view only make mosquito control more difficult of achievement in New Jersey.

New Jersey Environmental Lobby

Respond to: Marie Curtis
7 Robin Drive
Oakhurst, N.J.

Comments on S.3741
for the
Senate Committee on Labor, Industry and Professions

The New Jersey Environmental Lobby strongly supports S.3741 expanding the pesticide control act of 1971. Senator Lesniak's bill is a logical extension of principles already recognized in New Jersey law.

Extension of the "right-to-know" to farmworkers is long overdue. NJEL supported inclusion of farm employees when the right-to-know legislation was first introduced. Regular exposure to toxic residues is probably more common in agriculture than in any other field of employment. Certainly workers exposed to such health threats should be informed as to the specific dangers they face. Posting of field re-entry times is another reasonable requirement. None of this would seem to place an undue financial burden on the farming community.

Another incidence of a logical move long overdue is the requirement for reporting incidents of pesticide exposure. Reducing the risk of toxic exposure for all New Jersey's residents should be a goal of state government. Information on the kinds of risks, the frequency and the locations of same is but a first step in this process.

The limitation on aerial spraying of broad-based chemical pesticides over residential areas is another reasonable step in punlic health protection. Certainly in areas where children are present every effort should be made to avoid contamination. Notification requirements again do not seem unduly burdensome.

Certification of all those who apply pesticides commercially is another effort that should result in risk reduction for the populace as a whole. Expanding the Pesticide Control Council is another step in this direction providing more representation and expertise.

Essentially we see this measure aimed at protection of citizens from unnatural chemical hazard. We in NJEL applaud the sponsor and heartily endorse S.3741.

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TESTIMONY OF THE MIGRANT LEGAL ACTION PROGRAM INC
CONCERNING THE LESNIAK-D'AMICO BILL

Prepared by Shelley Davis, Staff Attorney

The Migrant Legal Action Program, Inc. (MLAP) is a non-profit organization which provides free legal assistance to migrant and seasonal agricultural workers throughout the nation. MLAP submits this testimony on behalf of its farmworker clients who live and work in New Jersey.

THE LESNIAK-D'AMICO BILL IS VITALLY NEEDED: Farmworkers face life-threatening dangers from acute and chronic pesticide exposure, but current federal law deprives them of the information they need to protect themselves. For at least a year, OSHA and EPA have been trying to determine which agency will provide farmworkers with even minimal right to know protections. But to date, neither agency has taken any action to protect these workers. Because of the glacial pace at which the federal government is responding to this problem, state legislators around the nation have stepped forward to protect the citizens of their states. Similarly, New Jersey must act -- and act now -- to protect its farmworkers and other citizens.

I. The Health Risks Farmworkers Face from Pesticide Exposure

Each year an estimated 300,000 farmworkers are injured by exposure to pesticides.1/ A 1988 study of farmworkers working in Washington State found that 43% of those surveyed had been sprayed by pesticides while working.2/ Pesticide poisonings usually occur through direct spray,3/ drift4/ or exposure to

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1/ R. Wasserstrom and R. Wiles, Field Duty: U.S. Farmworkers and Pesticide Safety at 3 (1985). Seventy-seven percent of the 1.08 billion pounds of pesticides applied each year are used on agricultural crops. U.S. Environmental Protection Agency, Economic Analysis Branch, Pesticide Industry Sales and Usage (1986).

2/ M. Mentzer and B. Villalba, Pesticide Exposure and Health: A Study of Washington Farmworkers at v (1988). Similarly in 1980, Florida Rural Legal Services, Inc. conducted a survey and found that 48.5% of the farmworkers responding had been directly sprayed with pesticides at least once while they worked. V. Wilk, The Occupational Health of Migrant and Seasonal Farmworkers in the United States at 61 (1986).

3/ In Chacon v. Heinz Corp. No. 84-4017 (C.D. Ill. 1986) 7 farmworkers sued their employer and the cropduster he hired for the personal injuries they received when they were sprayed while harvesting tomatoes. The EPA also fined the pesticide

pesticide residues on crops. Acute pesticide poisoning may cause skin rashes, eye injuries, fever, vomiting or even death.5/ Chronic exposure may lead to birth defects, sterility, neurological damage, kidney and liver illness or cancer.6/

For example, in 1984, three farmworkers suffered acute pesticide poisoning in three separate incidents in New Jersey. On two occasions the workers were sprayed by a tractor driver, who was applying a highly toxic pesticide in an adjacent field. On a third occasion, the migrants were sprayed with captan -- a known carcinogen -- by a cropduster that flew over the camp where they were housed.7/

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applicator for applying pesticides in inappropriate wind conditions. In Re: Bolduc & Sons, Inc., EPA Region V, Docket No. IF & R - V- 043 -P. This 1984 complaint was only the fourth time a complaint was issued against an applicator for injuring farmworkers, since the EPA was established in 1972.

4/ An estimated 85 - 90% of pesticides applied by aerial application do not hit the target and are dispersed through the air, soil and water through drift. G. Matthews, Pesticide Application Methods (1982). Pesticides applied aerially or by ground rig sprayers can drift up to a mile or more from the site of application, even under normal wind conditions. Id.

5/ The Occupational Health of Migrant and Seasonal Farmworkers in the United States at 60.

6/ Id. at 67-68 (at least 50 active ingredients in pesticides are known or suspected carcinogen and 20 are teratogens). Numerous studies have linked pesticide exposure to cancer. See, e.g., H. Stubbs, J. Harris, R. Spear, A Proportionate Mortality Analysis of California Agricultural Workers, 1978-1979 6 Amer. J. Indust. Med. 305 (1984)(found that farmworkers had an increased risk for stomach and brain cancer); G. Everett, A. Blair and K. Cantor, Environmental Chemical Exposures as Risk Factors for Leukemia and Non-Hodgkin's Lymphoma, 122(3) Amer. J. Epid. 535 (1985)(study of Iowa and Minnesota residents found that exposure to insecticides and herbicides was related to significantly increased risk for leukemia and non-Hodgkin lymphoma).

7/ The parties agreed to settle this action for money damages and changes in the grower's work practices. With respect to the latter, the grower agreed, inter alia, to provide his workers with training on pesticide safety; post notices informing workers of each pesticide application; provide protective clothing to all pesticide handlers; and refrain, to

Some pesticide exposure incidents end in tragedy. In 1983, a farmworker was drenched with the pesticide dinoseb and died within 24 hours.8/ In 1982, a farmworker in her first trimester of pregnancy was sprayed with pesticides; as a result she gave birth to a baby afflicted with severe birth defects who died two weeks later.9/ In another California incident a pregnant farmworker, sprayed during the first trimester of pregnancy, gave birth to a child who has no arms or legs.10/

The full extent of the chronic effects caused by virtually all available pesticides remains unknown.11/ Nonetheless, at least 50 active ingredients are known or suspected carcinogens and 20 are known or suspected teratogens. See V. Wilk, The Occupational Health of Migrant and Seasonal Farmworkers in the United States at 67-68 (1986). Indeed, numerous epidemiological studies have begun to document the link between pesticide exposure and cancer. See M. Moses, Cancer in Humans and Potential Occupational and Environmental Exposure to Pesticides: Selected Abstract (1988), attached as Exhibit 1.

According to the Bureau of Labor Statistics, farmworkers suffer a higher rate of chemical-related injury than any other occupation. 52 Fed. Reg. 16,050, 16,060 (1987). Medical experts believe that the extent of injury from such incidents could be significantly reduced if workers knew how to prevent injury or minimize harm once an exposure occurred.

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the extent practicable, from applying pesticides in the orchards when workers were working there or near the labor camp when workers were in their quarters. Ramirez v. Adamucci, C. A. #85-2374 (D.N.J. September 9, 1986)(Order on Settlement).

8/ See 51 Fed.Reg. 36,634, 36,637 (1986).

9/ Flores v. Mobay, C 83 4385 (N.D. Cal.)(case settled for substantial damages.)

10/ Aguirre v. Stauffer, #184159 (Kern Cty. Super. Ct.).

11/ The EPA has been reregistering pesticides for more than a decade, but only a handful of active ingredients have been evaluated for chronic effects. See U.S. General Accounting Office, Pesticides: EPA's Formidable Task to Assess and Regulate Their Risks, (GAO/RCED-86-125) April, 1986. Under the 1988 Amendments to the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. § 136 et seq., EPA may not fully evaluate the health risks associated with the pesticides which are currently on the market, for at least another nine years.

II. Neither Current Nor Proposed Federal Regulations Provide Adequate Protection for Farmworkers

The OSHA Hazard Communication Standard (HCS), promulgated on August 24, 1987, promised to give farmworkers a federal "right to know" about the pesticides they were exposed to. However, OSHA has since reneged on that promise and determined that it will not enforce the HCS with respect to agricultural pesticides.12/ Instead it has ceded the field to EPA, on the grounds that EPA has primary responsible for protecting workers exposed to pesticides. Under the federal pesticide law that EPA administers states are permitted to promulgate stricter standards.

Current EPA worker protection regulations, 40 C.F.R. § 170, comprise little more than a single page in the Code of Federal Regulations. They provide no training or right to know protections. On July 8, 1988, (more than a year ago), EPA proposed new, more comprehensive worker protection regulations. See Exhibit 2, attached. These regulations are still not final! Even if the proposed regulations do become law, however, they are no substitute for the proposed Lesniak-D'Amico Bill, because they provide far less than is needed to protect workers from pesticide hazards.

Indeed, the EPA's own Scientific Advisory Panel was sharply critical of the EPA proposed worker protection regulations. See Exhibit 7, attached. In an opinion dated March 9, 1988, the Scientific Advisory Panel stated:

> The Panel commends the Agency on improving the worker protection standards but we believe that in several aspects it does not go far enough in protecting the workers in their actual situations in the field. The philosophy of establishing only minimum standards seems inappropriate when more stringent standards have already been proven and accepted in California and Texas without detriment to the agricultural economy.

Id. at 2 (emphasis added). In addition, the Panel specially recommended that "names of pesticides used and the common symptoms of toxic exposure to these pesticides should be provided to workers on a routine basis." Id. EPA's proposed worker protection regulations do not require this, but the

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12/ Even if the HCS did apply, it would only be applicable to farms which employ 11 or more workers. Since approximately 2/3 of all farms employ fewer than 11 workers, most farmworkers would still remain without protection.

Lesniak-D'Amico Bill would properly ensure that New Jersey farmworkers receive this information.

Training: Under the proposed EPA worker protection regulations, field workers will receive no comprehensive training concerning pesticide hazards, preventive practices, signs and symptoms of pesticide poisoning, first aid or other pertinent pesticide information. Rather, EPA will require that farmers post 16 simple statements -- in English only-- concerning basic safety practices. See Proposed 40 C.F.R. §§ 170.32, 170.42. However, vast numbers of farmworkers speak little or no English, so EPA's required poster will be of little or no benefit to them. In any case, this poster is no substitute for adequate training concerning potentially life-threatening chemicals. Indeed, even under the EPA proposed regulations, fieldworkers will never be trained to read pesticide labels or Material Safety Data Sheets. Nor will growers be required to tell a worker the name of the pesticide he's been exposed to -- unless the worker specifically requests it. As a consequence, workers will be deprived of the basic information they need to recognize potential pesticide hazards -- which would help them prevent exposures -- and to recognize pesticide poisoning symptoms -- which would help minimize injuries.

Chemical Lists: Under the proposed EPA regulations, employers are not required to keep workplace chemical lists. They would only be required to orally inform workers of the areas which have been treated with pesticides and the applicable reentry intervals. See Proposed 40 C.F.R. § 170.42. Because the information is transmitted orally and not in writing, workers who have difficulty understanding the oral warning may not receive this vital information.

In addition, since the growers will keep no written record of pesticide applicators, chronic poisoning injuries, like birth defects, which may arise weeks or months later, will never be traced to the chemical that caused them. For regulatory agencies that are scrambling to discover which chemicals are harmful, this is crucial public health data that will simply be lost.

Moreover, for treating physicians, knowledge of the specific chemical cause is frequently crucial for determining the proper treatment. If the grower keeps no accurate records of which chemical he applied on which day, medical personnel, who later seek to treat an injured worker will be at a significant disadvantage in effectuating a cure.

Material Safety Data Sheets: Under the proposed EPA regulations, growers are not required to maintain Material Safety Data Sheets (MSDS) or to provide them to their workers

upon request. MSDS's are particularly valuable because they include information on the signs and symptoms of poisoning, first aid, etc. Since OSHA now requires chemical manufacturers to prepare these documents and ship them with the chemicals they sell, the growers will have no difficulty obtaining them. Since MSDS's are very valuable sources of information, to which workers otherwise have no access, New Jersey should require employers to make them available to their workers under state law.

Accident Reporting System: The EPA now operates no accident reporting system. Consequently, the full extent of pesticide exposures and injuries is not known. Nor do agencies have reliable information on which pesticides account for the majority of injuries. Because this information is extremely valuable to regulatory agencies, it should be kept.13/

Training of Medical Personnel: The EPA currently has no program to train physicians to recognize the signs and symptoms of pesticide poisoning. All too often, workers, who have been exposed to pesticides, are treated by physicians who are not trained to recognize their symptoms as signs of pesticide poisoning. Consequently, they frequently receive an incorrect diagnosis and inappropriate treatment. Where a physician mistakes pesticide poisoning for the flu or gastroenteritis, s/he cannot but treat the patient incorrectly. Consequently, the proposed physician training program is an excellent step in providing adequate health care to those exposed to pesticides.

Antiretaliation Provision: Although the proposed EPA regulations purport to prohibit an employer from terminating or disciplining a worker who refuses to violate the worker protection regulations, they provide no mechanism to enforce this protection. The anti-retaliation provision, included in the Lesniak-D'Amico Bill, is a crucial measure to make the pesticide protections effective. Without such protection, workers who earn an average of $5,000 per year, will not risk losing their job to invoke the protections of the pesticide law -- even though it means risking their health.

Private Right of Action: Although many environmental laws contain a private right of action, FIFRA, the federal pesticide law does not. As a result, workers and others, injured due to

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13/ Currently, the State of California maintains a mandatory physician reporting system of pesticide exposures, which is one of the few sources of accurate pesticide exposure data in the nation. Approximately 3,000 incidents are reported each year. Although other states, including Arizona, Florida and Texas, also have reporting requirements, they are not rigorously enforced in these areas.

violations of FIFRA or the worker protection regulations, have no federal claim they can bring to court. (Instead, they must rely on state tort lawsuits.) In order to ensure that the protections provided by this bill are enforced, it is extremely important to include a private right of action. In this way, those most directly affected by pesticide practices can take action to ensure compliance with the law.

III. Other States Have Enacted Similar Measures

Because of the inadequacy of federal laws, other states have stepped forward to enact pesticide "right to know" laws, similar to the Lesniak-D'Amico Bill. In the last few years, both Texas and Washington State have enacted laws which mirror the provisions proposed here in many ways.

Texas: The Agricultural Hazard Communication Act, passed in Texas, attached as Exhibit 3, provides for: comprehensive worker training, development of "crop sheets" by the Texas Department of Agriculture to provide adequate pesticide safety information, grower compilation and maintenance of work place chemical lists and MSDS's, anti-retaliation protection, etc.

For example, § 125.005 of the Act, requires employers to complete work place chemical lists, including the date and location of each pesticide application, and maintain them, together with the appropriate MSDS's, for a period of 30 years. Such lists must also be accessible to workers or their representatives.

Recognizing the need for comprehensive worker training, the act directs the Texas Department of Agriculture ("TDA") to develop and undertake an on-going training program to educate agricultural workers on: how to read and interpret MSDS's and pesticide labels; the acute and chronic effects of pesticide exposure; safe handling techniques; protective clothing and equipment; first aid and other subjects. In counties with large farmworker populations the state agency is training the workers itself. In other places, the employers are supplied the training materials for their workers. In addition, the state agency is directed to compile "crop sheets," see Exhibit 4, attached, in English and Spanish, which provide specific safety information about the pesticides applied on particular crops. See §§ 125.009 and 125.010. Unless the worker has completed the TDA's training program, the employer must provide the worker with a copy of the crop sheet, read it to the worker and provide the worker with additional health and safety information. See § 125.011.

In addition, the law provides for anti-retaliation protection for workers who exercise their rights under the

Act, see § 125.013, and a complaint procedure to enforce that right. See § 125.016.

Under previously existing law, the Texas Department Of Health is required to maintain a pesticide incident reporting system.

Washington State: This past May, Washington State also enacted a comprehensive pesticide law to protect its agricultural workers. See Exhibit 5, attached. The new law provides for, inter alia, required employer completion and maintenance of workplace chemical lists, the creation of a panel to study and recommend improved pesticide control measures, the education of medical personnel so they can better recognize and treat pesticide poisoning, a physician reporting system for pesticide exposure incidents, a private right of action for violations of the law, etc.

For example, the new law requires that all persons applying pesticides to more than one acre of agricultural land keep records of each pesticide application. See § 39. The record must state, inter alia, the crop or site to which the pesticide was applied, the amount of the chemical applied, the wind direction and velocity, and the name and address of the pesticide applicator. These records must be kept for at least 7 years and be made available to an employee or his/her representative, designated state agencies, treating medical personnel, etc.14/

CONCLUSION

In sum, by enactment of the Lesniak-D'Amico bill, New Jersey will take its place along side of other states which have recognized the need to enact comprehensive measures to protect its citizens from unnecessary injuries due to preventable pesticide exposures.

14/ The California Department of Food and Agriculture has also recently proposed new regulations which would require all pesticide applicators to keep records of all pesticide applicators and make them available to their employers. See Exhibit 6, attached.

Cancer in Humans and Potential Occupational and Environmental Exposure to Pesticides

Selected Abstracts

Prepared by Marion Moses, M.D.

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SECTION ONE: MORTALITY STUDIES

Alavanja, M.C.R., Rush, G.A., Stewart, P., et al: Proportionate mortality study of workers in the grain industry. J Nat Can Inst 78(2):247-252, 1987.

A proportionate mortality study of 1,114 members (all white males) of the American Federation of Grain Millers union who died between 1968-83, compared to the U.S. population. Statistically significant increased risk was found for pancreatic cancer (PMR 191, PCMR of 171 was not significant), and other lymphoma (PMR 272, PCMR 249).

Non-significant elevated ratios that were found for stomach cancer (PMR 141, PCMR 121), bladder cancer (PMR 178, PCMR 155), lymphosarcoma (PMR 216, PCMR 191), Hodgkin disease (PMR 174, PCMR 153), and leukemia (PMR 170, PCMR 139). Potential pesticide exposures included methyl bromide, ethylene dibromide, carbon tetrachloride, phosphine, and malathion, among others.

Alavanja, M.C.R., Malker, H., Hayes, R.B.: Occupational cancer risk associated with the storage and bulk handling of agricultural foodstuff. J Toxicol Environ Health 22(3)247-254, 1987.

A study of cancer incidence in 2,649 Swedish grain millers (all white males) between 1961-79, compared to the Swedish general population. Statistically significant increased risk was found for liver cancer (SIR 238).

Non-significant increased ratios were found for cancer of the stomach (SIR 103), colon (SIR 116), kidney (SIR 113), bladder (SIR 125), other lymphoma (SIR 137) and multiple myeloma (SIR 139).

Barthel, E.: Increased risk of lung cancer in pesticide-exposed male agricultural workers. J Tox Environ Health 8:1027-1040, 1981.

A proportionate mortality study of 1,658 agricultural pesticide sprayers in East Germany, 169 of whom died between 1948-78, compared to the general population (excluding Berlin). Statistically significant increased risk was found for lung cancer (PCMR 180).

Non-significant elevated risk was found for cancer of the pancreas (PCMR 146), bladder (PCMR 118) and other genitourinary cancer (PCMR 186). Potential pesticide exposures included Zineb, Maneb, Atrazine, Simazine, Amitrole, arsenic, DDT, Lindane, methyl parathion, toxaphene, DNOC, 2,4-D, 2,4,5-T, among others.

Blair, A., Grauman, D.J., Lubin, J.H.: Lung cancer and other causes of death among licensed pesticide applicators. J Nat Can Inst 71(1):31-37, 1983.

A mortality study of 3,827 pest control operators licensed in Florida during 65-66, of whom 378 had died as of January 1, 1977. For those with 20 or more years latency, statistically significant increased risk was found for lung cancer (SMR 289), and a non-significant elevation for all cancers (SMR 177).

For the entire cohort, non-significant elevated risk was found for all cancers (SMR 114), lung cancer (SMR 135) and brain cancer (SMR 200). Potential pesticides exposures included Aldrin, Chlordane, DDT, heptachlor,

toxaphene, lindane, chlorpyrifos, diazinon, malathion, dichlorvos, carbaryl, propoxur,bendiocarb, 2,4-D, 2,4,5-T, Paraquat, pentachlorophenol, Captan, folpet, arsenic, methyl bromide, and para-dichlorobenzene, among others.

Bond, G.G., Wetterstroem, N.H., Roush, G.J., et al.: Cause specific mortality among employees engaged in the manufacture, formulation, or packaging of 2,4-dichlorophenoxyacetic acid and related salts. Brit J Ind Med 45:98-105, 1988.

A mortality study of 111 deaths up to the end of 1982 of a cohort of 878 DOW chemical company workers in 2,4-D production, compared to U.S. white males. Statistically significant increased risk was found for lymphopoietic cancer (SMR 312) and for cancer of ill defined sites (SMR 388).

Non-significant increased risk was found for all malignant neoplasms (SMR 118) and for respiratory cancer (SMR 388). No cases of brain cancer were found.

Burmeister, L.F.: Cancer mortality in Iowa farmers, 1971-78. J Nat Can Inst 66(3):461-4, 1981.

A mortality study of 6,402 Iowa farmers who died between 1971 and 1978, compared to 13,809 non-farmers. Statistically significant increased risk for farmers was found for cancer of the stomach (SMR 135), colon (SMR 122), pancreas (SMR 123), skin (SMR 131), prostate (SMR 141), bladder (SMR 114), kidney (SMR 122), lip (SMR 206), Hodgkin disease (SMR 137), leukemia (SMR 135), other lymphoma (SMR 129) and multiple myeloma (SMR 147).

Non-significant elevated ratios were found for: bone cancer (SMR 126), and brain cancer (SMR 111).

Carlson, M.L., Petersen, G.R.: Mortality of California agricultural workers. J Occup Med 20(1):30-32, 1978.

A mortality study in California comparing 2,936 farm laborers with 908 farm operator / managers who died between 1959-61, using State Health Department tapes indexing death to occupation.

A non-significant elevated mortality rate ratio between laborers and managers for all cancers of 1.13 was found.

Coggon, D., Pannett, B., Winter, P.D., et al.: Mortality of workers exposed to 2 methyl-4 chlorophenoxyacetic acid. Scan J Work Environ Health 12:448-454, 1986.

A mortality study of 5,754 workers (all white males) who both manufactured and sprayed MCPA as well as other pesticides from 1947 to 1975 for the same British company. As of December 1983, there were 1,039 deaths, 297 from cancer. Statistically significant increased risk compared to the general rural population was found for nasal cancer (SMR 493).

Non-significant elevated ratios were found for all cancer (SMR 107), cancer of the tongue (SMR 112), digestive system (SMR 273), colon (SMR 102), larynx (SMR 174), lung (SMR 115), non-melanoma skin (SMR 306), prostate (SMR 132), testes (SMR 223), brain (SMR 124), thyroid (SMR 170), non-bladder genitourinary (SMR 227), small intestine (SMR 159), gallbladder (SMR 119),

leukemia (SMR 177), multiple myeloma (SMR 162) and soft-tissue sarcoma (SMR 104). Additional potential pesticide exposures included DNOC, copper oxychloride, a variety of organophosphorus insecticides, chlortrizaine herbicides, and 2,4,5-T.

Delzell, W., Grufferman, S.: Mortality among white and nonwhite farmers in North Carolina, 1976-1978. Am J Epidem 121(3):391-402, 1985.

A mortality study in North Carolina of 9,245 white and 3,508 non-white (94% black) farmers who died between 1976-78, compared to the general population of the state. Statistically significant increased risk was found in white farmers for non-melanoma skin cancer (PMR 180) and in non-white farmers for melanoma skin cancer (PMR 630) and leukemia (PMR 190).

Non-significant elevated ratios were found in white farmers for melanoma (PMR 120), prostate cancer (PMR 110); and in non-white farmers for brain cancer (PMR 230) and other lymphoma (PMR 120).

Fasal, E., Jackson, E.W., Klauber, M.R.: Leukemia and lymphoma mortality and farm residence. Amer J Epidemiol 87:267-74, 1968.

A mortality study of 1,857 farmers in California who died between 1959-61, compared to non-farmers in the state. Non-significant elevated ratios were seen in both males and females for leukemia (PMR 114), and in females for Hodgkin disease (PMR 109), and multiple myeloma (PMR 102).

Gallagher, R.P., Threlfall, W.J., Spinelli, J.J., et al.: Occupational mortality patterns among British Columbia Farm Workers. J Occup Med 26(12):906-908, 1984.

A proportionate mortality study of 2,328 British Columbia farmworkers (all males) who died between 1950-78. Non-significant elevated ratios were found for cancer of the stomach (PCMR 126), pancreas (PCMR 124), and prostate (PCMR 109).

Gallagher, R.P., Threlfall, W.J., Jeffries, E., et al.: Cancer and aplastic anemia in British Columbia farmers. J Nat Can Inst 72(6):1311-15, 1984.

A proportionate mortality study of 28,032 farmers in British Columbia (all males) who died between 1950-78. Statistically significant increased risk was found for cancer of the stomach (PCMR 119), pancreas (PMR 112, PCMR 105 not significant), prostate (PCMR 113), lip (PCMR 191), leukemia (PCMR 122), nasal cancer (PMR 186, PCMR 178 not significant), and aplastic anemia (PMR 186, PCMR 178 not significant).

A non-significant increased ratio was found for multiple myeloma (PCMR 103).

Mabuchi, K., Lilienfeld, A.M., Snell, L.M.: Cancer and occupational exposure to arsenic: A study of pesticide workers. Prev Med 9:51-77, 1980.

A mortality study of 3,141 hourly and salaried men and women who worked 4 months or more between 1946-74 at a pesticide manufacturing plant in Baltimore, Maryland. As of August, 1977, there were 240 deaths, 56 from

cancer. In males, compared to the U.S. general population statistically significant increased risk was found for all cancers (SMR 168), and lung cancer (SMR 265).

Non-significant increased ratios were found for oral cancer (SMR 201), cancer of the esophagus (SMR 451), stomach (SMR 172), skin (SMR 162) and lymphopoietic cancer (SMR 209). The number of female cancer deaths was too small for significance testing, however an elevated ratio was found for rectal cancer (2 observed vs. 0.4 expected). Potential pesticide exposures included lead and calcium arsenate, sodium, zinc, and magnesium arsenite, copper acetoarsenite (Paris green), DDT, Aldrin, toxaphene, chlordecone, various organophosphates, various carbamates, 2,4-D, monuron-TCA and other organic herbicides.

MacMahon, B.B., Monson, R.R., Wang, H.H., et al.: A second follow-up of mortality in a cohort of pesticide applicators.30:429-32, 1988.

A mortality study up to the end of 1984 of 1,082 deaths in a cohort of 16,124 male pesticide applicators (PCOs) who worked for one of three companies between 1967-1976, compared to U.S. white males. Statistically significant increased risk was found for lung cancer (SMR 135).

Non-significant increased risk was found for all malignant neoplasms (SMR 111), skin cancer (SMR 126), bladder cancer (SMR 123), and other cancer (SMR105).

Riihimaki, V., Asp, S., Hernberg, S.: Mortality of 2,4- dichloro-phenoxy acetic acid and 2,4,5-trichlorophenoxyacetic acid herbicide applicators in Finland. First report of an ongoing prospective study. Scan J Work Environ Health 8:37-42, 1982.

A mortality study of 1,926 Finnish pesticide sprayers who worked for two weeks or more between 1955-71 as applicators of 2,4-D and 2,4,5-T. As of 1980, 144 had died, 26 from cancer. Non-significant elevated ratios were found for cancer of the esophagus/stomach (SMR 108, based on 4 cases), lung cancer (SMR 108, 12 cases), prostate cancer (SMR 182, 2 cases) and multiple myeloma (SMR 500, 1 case).

Saftlas, A.F., Blair, A., Cantor, K.P., et al.: Cancer and other causes of death among Wisconsin farmers. Amer J Indus Med 11:119-129, 1987.

A proportionate mortality study of 35,972 Wisconsin farmers (all white males) who died from 1968-76, compared to the general U.S. general population and to non-farmers in Wisconsin (excluding Milwaukee). Statistically significant increased risk was found for cancer of the stomach (PMR 124, PCMR 113), pancreas (PMR 110, PCMR was 98), prostate (PMR 122, PCMR 114), eye (PMR 375, PCMR 343), lymphosarcoma (PMR 125, PCMR 110 not significant), Hodgkin disease (PMR 155, PCMR 126 not significant), other lymphoma, two thirds of which were multiple myeloma (PMR 123, PCMR 110 not significant), lymphopoietic cancer (PMR 123, PCMR 110), and leukemia (PMR 120, PCMR 109 not significant).

Elevated ratios that were not statistically significant were found for cancer of the rectum (PMR 113), bone (PMR 105), skin (PMR 115), testes (PMR 103), kidney (PMR 106), and brain (PMR 110).

Shindell, S., Ulrich, S.: Mortality of workers employed in the manufacture of Chlordane: An update. J Occup Med 28(7):498-501, 1986.

A mortality study of 800 persons who worked 3 months or more from 1946-85, at the only plant that manufactures chlordane in the U.S. (Velsicol plant in Illinois). 181 deaths were traced, 37 from cancer. No statistically significant increased risks were found. Of the 37 cancers, 12 were lung (SMR 86), 4 colon/rectal, 3 stomach, 2 pancreas, 2 renal, 9 of different types (not specified) and 5 of unknown type.

Infante, P.F., Freeman, C.: Cancer mortality among workers exposed to chlordane (letter). J Occup Med 29(11):908-909, 1987.

A critique of the Shindell mortality study of chlordane workers.

Shindell, S.: Cancer mortality among workers exposed to Chlordane (letter). J Occup Med 29(11):909-911, 1987.

A reply to the critique by Infante and Freeman.

Sobel, W., Bond, G.G., Baldwin, C.L., et al.: An update of respiratory cancer and occupational exposure to arsenicals. Amer J Ind Med 13:263-270, 1988.

A 1982 update of a mortality study of workers involved in the manufacture of arsenic-containing insecticides at the Michigan Division of the Dow Chemical company, previously studied up to 1973 in which a three-fold increased risk of respiratory cancer was found (SMR 330). Nine additional cases subsequent to 1973 were observed versus 7.8 expected (SMR 116).

Stubbs, H.A., Harris, J., Spear, R.C.: A proportionate mortality analysis of California agricultural workers, 1978-1979. Amer J Indus Med 6:305-320, 1984.

A proportionate mortality study in California of 7,504 farmworkers and 7,404 farm owners/managers who died between 1978-79, compared to the state's general population. Statistically significant increased risk was found in white (includes Hispanics) farmworkers for cancer of the stomach (PCMR 134), and in non-whites for brain cancer (PCMR 155).

Non-significant elevated ratios were found in white farmworkers for oral cancer (PCMR 111), cancer of the esophagus (PCMR 121), liver and gallbladder (PCMR 145), larynx (PCMR 129), lung (PCMR 108), bone (PCMR 159), prostate (PCMR 101), other lymphoma (PCMR 107); and in non-whites for cancer of the esophagus (PCMR 115), stomach (PCMR 101), rectum (PCMR 190), liver and gallbladder (PCMR 151) and other lymphoma (PCMR 114).

Statistically significant increased risk in white farm owner/managers was found for cancer of the prostate (PCMR 122) and other lymphoma (PCMR 150) and in non-whites for cancer of the stomach (PCMR 202), and rectum (PCMR 224).

Non-significant elevated ratios were found in white farmer managers for cancer of the stomach (PCMR 109), rectum (PCMR 109), liver (PCMR 137), larynx (PCMR 111), skin (PCMR 130), kidney (PCMR 102) and lymphopoietic (PCMR 105), and in non-whites for cancer of the esophagus (PCMR 127), colon (PCMR 107), liver (PCMR 150), other lymphoma (PCMR 127) and lymphopoietic cancer (PCMR 108).

Wang, H.H., MacMahon, B.: Mortality of pesticide applicators. J Occup Med 21(11):741-744, 1979.

A mortality study using the personnel records of 3 nationwide pest control companies based in Atlanta, Memphis and Tuscon with members in 40 states, of 16,126 members (all males) employed for three months between 1967-76, and who died in this time period. 311 deaths were ascertained of which 47 were from cancer.

Non-significant elevated ratios were found for cancer of the lung (SMR 115), skin (SMR 173), and bladder (SMR 277). Potential pesticide exposures included chlordane, heptachlor, as well as a variety of fumigants, botanicals, carbamates, organophosphates, and other chlorinated hydrocarbons.

Wiklund, K.: Trends in cancer risks among Swedish agricultural workers. J Nat Can Inst 77(3):657-664, 1986.

A prospective study of the time related trends from 1961 to 1979 in the incidence of cancer in 254,417 Swedish males aged 20 to 69 employed in agriculture in 1960, compared to 1,725,845 controls. Statistically significant increased risk in agricultural workers was found for cancer of the lip (SMR 192), skin (SMR 115), stomach (SMR 107), malignant melanoma (SMR 139), and multiple myeloma (SMR 120). A trend for increasing risk over 3 time periods (1967-73, 1974-79, 1974-79) was found for cancer of the lip, liver, prostate, nasal and genitourinary cancer.

Wiklund, K.: Testicular cancer among agricultural workers and licensed pesticide applicators in Sweden. Scan J Work Environ Health 12:630-631, 1986.

A prospective study of the incidence of testicular cancer in 254,417 Swedish men employed in agriculture as determined by a 1960 census. Compared to controls a non-significant trend for increasing risk of testicular cancer over time was found — an SMR of 83 in 1961-66, increased to 94 in 1967-73, and to 135 in 1974-79. Eighteen cases of testicular cancer were found in a cohort of 20,245 pest control operators licensed between 1965 and 1976, with 11.6 expected (SMR 155), which was not significant.

Wong, O., Brocker, W., Davis, H.V., et al: Mortality of workers potentially exposed to organic and inorganic brominated chemicals, DBCP, TRIS, PBB and DDT. Brit J Indus Med 41:15-25, 1984.

A mortality study of 3,579 workers (all males) employed between 1935 and 1976 in 3 chemical manufacturing plants, 2 in Michigan, one in Arkansas. Of 541 who had died as of December, 1976, 112 were from cancer. Non-significant elevated ratios were found for all cancer (SMR 102), cancer of the liver (SMR 124), lung (SMR 131), prostate (SMR 164), testes (SMR 193), bladder (SMR 188), kidney (SMR 145), brain (SMR 132), leukemia (SMR 167), and lymphatic cancer (SMR 111). The mortality from testicular cancer was significantly higher (SMR 1799, based on 2 cases) in workers whose common exposure was to methyl bromide. Potential chemical exposures included DBCP, methyl bromide, ethyl bromide, bromochlorobenzene, chlorobromomethane, sodium and potassium bromide, PCBs, PBBs, Tris, and DDT, among others.

SECTION TWO: CASE-CONTROL STUDIES

Austin, H., Delzell, E., Grufferman, S., et al.: Case-control study of hepato-cellular carcinoma, occupation and chemical exposures. J Occup Med 29:665-69, 1988.

A case-control study of 86 persons aged 18 to 84 at one of five medical centers (Alabama, Duke, Miami, Pennsylvania and Harvard) with primary liver cancer, 60 men and 26 women; compared to 146 controls with other cancers (except those related to smoking).

Non-significant elevated risk was found for: pesticide exposure (RR 2.1), employment in agriculture (RR 1.1), employment in livestock agriculture (RR 1.5), and occupation as farmer or farmworker (RR 1.4). There was no consistent trend between years of farming and risk for liver cancer.

Blair, A., Thomas, T.L.: Leukemia among Nebraska farmers: a death certificate study. Amer J Epidemiol 110(3):264-273, 1979.

A case-control study in Nebraska of 1,084 white males who died of leukemia from 1957-74, compared to 2,168 deaths from other cancers. Statistically significant increase risk for leukemia was found in farmers (OR 1.25), with the risk being higher for those born after 1900 (OR 1.64), and even higher for those from high insecticide use counties (OR 1.95).

Blair, A., White, D.W.: Leukemia cell types and agricultural practices in Nebraska. J Occup Med 40(4):211-14, 1985.

A further analysis of the above study of Nebraska farmers in which it was found that farmers from high pesticide and fertilizer-use counties tended to be at higher risk of acute lymphatic, acute myeloid, chronic myeloid, and acute unspecified leukemia than farmers from low use counties.

Blair, A., Everett, G., Cantor, K., et al.: Leukemia and farm practices (abstract). Amer J Epidemiol 122:535, 1985.

A population-based case-control study in Iowa and Minnesota of 578 cases of histologically confirmed leukemia in white males aged 30 or older who died between 1980 - 1983, compared with 1,245 who died of other causes. More cases than controls reported use of dichlorvos on animals (OR 1.8). Pesticides used more frequently by cases than controls included Ethoprop (OR 1.9), nicotine (OR 1.6), Methoxychlor (OR 1.5) and DDT (OR 1.4).

Brown, L.M., Pottern, L.M.: Testicular cancer and farming (letter). Lancet 1:1356, 1984.

A case-control study, using death certificates only, from 3 Washington, D.C. medical centers, of 271 testicular cancer cases, aged 18-42 and diagnosed between 1976-1981.Compared to 259 controls with other cancers, a small increase in risk that was statistically significant (OR 1.4) was found for current farmers who grew up in the south.

Burmeister, L.F., Van Lier, S.F., Isacson, P.: Leukemia and farm practices in Iowa. Amer J Epidem 115(5):720-728, 1982.

A case-control study in Iowa of 1,675 white males over age 30 who died of leukemia between 1964-78, compared to 3,350 controls. Farmers had a statistically significant elevated risk for leukemia (OR 1.24), even higher in those who died between 1971-78 (OR 1.39). Significant excess mortality was also seen in high herbicide use counties for those born after 1900 (OR 1.60).

Burmeister, L.F., Everett, G.D., Van Lier, S.F., et al.: Selected cancer mortality and farm practices in Iowa. Amer J Epidem 118(1):72-77, 1983.

A case-control study in Iowa of 8,290 white males who died of cancer from 1964-78, (4,827 prostate, 1,812 stomach, 1,101 non-Hodgkin lymphoma, 550 multiple myeloma). Farmers were found to have statistically significant excess mortality from multiple myeloma (OR 1.5), non-Hodgkin lymphoma (OR 1.3), stomach cancer (OR 1.3) and prostate cancer (OR 1.2).

Cantor, K., Everett, G., Blair, A., et al.: Farming and non-Hodgkin's lymphoma (abstract). Amer J Epidem 122(3):535, 1985.

A case-control study of 622 Iowa and Minnesota white males, aged 30 or more who died of non-Hodgkin lymphoma between 1980-1983, compared to 1,245 men who died of other causes. A suggestion of excess mortality for farmers from small cell lymphocytic lymphoma (RR 1.35) was found, especially in those reporting use of high volume pesticides 20 or more years prior. Increased risk was associated with exposure to nicotine (OR 2.0), lindane (OR 1.9), 2,4,5-T (OR 1.9), glyphosate (Roundup) (OR 1.9), atrazine (OR 1.6), and Cyanazine (OR 1.6). Evidence of elevated risk of all types of non-Hodgkin lymphoma was found for uses of DDT (OR 1.5), chloramben (OR 2.2) and Carbofuran (OR 1.6).

Cantor, K.P., Blair, A.: Farming and mortality from multiple myeloma: a case-control study with the use of death certificates. J Nat Can Inst 72(2):251-255, 1984.

A case-control study of 411 deaths from multiple myeloma in Wisconsin white males (except Milwaukee), aged 30 or more who died from 1968-76, compared to 725 controls with smoking-related causes of death excluded. Statistically significant excess mortality was found in the farmers for multiple myeloma (OR 1.4), which was greater in those 65 and older (OR 1.5), and for those who died between 1968-70 (OR 1.9). Significant association with pesticide use was found for high insecticide use counties for those born after 1905 (OR 2.8).

Everett, G., Blair, A., Cantor, K., et al.: Environmental chemical exposures as risk factors for leukemia and non-Hodgkins's lymphoma (abstract). Amer J Epidem 122(3):535-6, 1985.

A population-based case-control study in Iowa and Minnesota based on interviews of 1200 white males (or their proxies) diagnosed with leukemia

and non-Hodgkin lymphoma between 1980-83. Statistically significant increased risk of leukemia was associated with exposure to insecticides (OR 1.5) and herbicides (OR 1.86). Significant increased risk for non-Hodgkin lymphoma was associated with exposure to methyl bromide (OR 2.82), insecticides (OR 1.9), herbicides (OR 2.06), and pentachlorophenol (OR 1.86).

Flodin, U., Fredriksson, M., Persson, B., et al.: Chronic lymphatic leukemia and engine exhausts, fresh wood, and DDT: a case-referent study. Brit J Ind Med 45:33-88, 1988.

A case-control study of 111 survivors of clinically and cytologically confirmed chronic lymphatic leukemia (71 male, 40 female) obtained from records of three hospitals in Sweden which were diagnosed between 1964 and 1984; compared to 431 controls (200 males, 231 female) randomly selected from population registers in the catchment area of the hospitals. The highest risk was associated with exposure to DDT (IRR 6.0) which along with contact with horses (IRR 2.5) and engine exhausts (IRR 2.2) seemed to explain the excess seen in farmers.

Hoar, S.K., Blair, A., Holmes, F.F., et al.: Agricultural herbicide use and risk of lymphoma and soft-tissue sarcoma. J Amer Med Assoc 256(9):1141-1147, 1986.

A population-based case-control study of 442 white male Kansas residents aged 21 or older diagnosed with soft-tissue sarcoma, Hodgkin disease, and non-Hodgkin lymphoma from 1976 through 1982, compared to 948 controls from the general population of the state. Non-significant increased risk of non-Hodgkin lymphoma was associated with herbicide use (OR 1.6).

Statistically significant increased risk was found for those exposed to herbicides more than 20 days a year (OR 6.0), and frequent users who mixed or appliedthe herbicides themselves (OR 8.0) The excess mortality was associated with use of phenoxyherbicides, specifically 2,4-D (OR 2.2). Neither soft-tissue sarcoma Hodgkin disease were found to be related to herbicide exposure.

Colton, T.: Herbicide exposure and cancer. J Amer Med Assoc 256:1176-78, 1986.

Editorial comments on the study described above.

McDuffie, H.H., Klaassen, D.J., Cockcroft, M.D., et al.: Farming and exposure to chemicals in male lung cancer patients and their siblings. J Occup Med 30:55-59, 1988.

A case-control mail questionnaire study of 165 Canadian males with primary lung cancer registered at Saskatoon or Regina Cancer Clinics from 1979 to 1983, compared to 165 of their nearest in age siblings. 47.8% of the patients were farmers and 37.6% of their siblings. The lung cancer cases were more likely to have been exposed to herbicides ($p = .054$), grains ($p = .015$), and to diesel fumes ($p = .005$).

McDowall, M., Balarajan, R.: Testicular cancer and employment in agriculture (letter). Lancet 1:510-511, 1984

Preliminary data from a case-control study in progress, using death certificates, of 2,434 males over age 15 who died from testicular cancer in England and Wales from 1971 - 1980. Agricultural workers were found to be at increased risk of testicular cancer (OR 1.42), the risk being significant in farmers and farm managers (OR 1.85), but not in farmworkers (OR 0.9).

Milham, S.Jr.: Leukemia and multiple myeloma in farmers. Amer J Epidem 91(1):307-310, 1971.

A case-control study based on a previous occupational mortality study, confined to leukemia / lymphoma group of cancers of 4,444 farmers compared to an equal number of controls using occupation as stated on death certificates in state files in Oregon and Washington. Statistically significant increased risk in farmers for multiple myeloma and leukemia was found (based on chi square analyses of frequencies).

Mills, P.K., Newell, G.R., Johnson, D.E.: Testicular cancer associated with employment in agricultural and oil and natural gas extraction. Lancet 1:207-209, 1984.

A case-control study of 347 patients with histologically confirmed germ-cell testicular cancer diagnosed at M.D. Anderson Hospital in Houston, Texas, between 1977-80. Statistically significant increased risk for testicular cancer was found to be associated with agricultural employment (OR 4.18), and was even higher for those whose present occupation was in farming (OR 6.27).

Mills, P.K., Newell, G.R.: Testicular cancer risk in agricultural occupations (letter). J Occup Med 26(11)798-799, 1984.

A brief discussion of testicular cancer as found in other studies and the author's findings as described above.

Morris, P.D., Koepsell, T.D., Daling, J.R., et al.: Toxic substance exposure and multiple myeloma: a case-control study. J Nat Can Inst 76(6):987-994, 1986.

A case-control study from SEER (Surveillance Epidemiology and End Results) cancer registry data in selected counties in the states of Washington and Utah, and in metropolitan Detroit and Atlanta, of 698 cases of multiple myeloma newly diagnosed between 1977-81, compared to 1,683 controls from the general population of the 4 study areas. Of the 20 exposure categories studied, the highest risk was for subjects who reported past exposure to pesticides (OR 2.6), which was statistically significant. In those cases where exposure was self reported the risk was even higher (OR 2.9).

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Musicco, M., Filippini, G., Bordo, B.M., et al.: Gliomas and occupational exposure to carcinogens: case-control study. Amer J Epidem 116(5):782-790, 1982.

A case-control study in Milan, Italy, of 42 cases of primary brain cancer, compared to 42 patients with other neurological disease at the same institute. Farmers were found to be a increased risk for glioma (OR 5.0).

Nandakumar, A., Armstrong, B.K., deKlerk, N.H.: Multiple myeloma in Western Australia: A case-control study in relation to occupation, father's occupation, socioeconomic status and country of birth. Int J Can 37:223-226, 1986.

A case-control study in Western Australia of 249 deaths from multiple myeloma between 1975-84, compared to 996 control who died from other causes. Non-statistically significant increased risk for multiple myeloma was found in farmers (OR 1.36) No relationship was found with farming as the father's occupation (OR 0.88).

Pearce, N.E., Smith, A.H., Howard, J.K., et al.: Non-Hodgkin's lymphoma and exposure to phenoxyherbicides, chlorophenols, fencing work, and meat works employment: a case-control study. Brit J Ind Med 43:75-83, 1986.

A case-control study in New Zealand of 83 cases of adult males with non-Hodgkin lymphoma, diagnosed between 1977-81, compared to 168 controls with other cancers and 228 general population controls. Non-significant increased risk for non-Hodgkin lymphomawas found for farmers exposed to chlorophenols (OR 1.4), for fencing work (OR 2.0), and meat works employment (OR 1.8), with greatest risk for employment in both activities (OR 5.7).

Pearce, N.E., Smith, A.H., Fisher, D.O.: Malignant lymphoma and multiple myeloma linked with agricultural occupations in a New Zealand cancer registry-based study. Amer J Epidem 121(2):225-237, 1985.

A case-control study in New Zealand of 734 white males aged 20 or older who died from lymphoma and multiple myeloma between 1977-1981, compared to 2,986 deaths from other cancers. A non-significant increased risk of lymphoma and multiple myeloma was associated with agricultural occupation (OR 1.25). Statistically significant increased risk for lymphoma and multiple myeloma was found for orchard farming (OR 5.51); for non-Hodgkin lymphoma in farmers diagnosed before age 65 (OR 1.76) and for multiple myeloma as well (OR 2.22).

Schumacher, M.C.: Farming occupations and mortality from non-Hodgkin's lymphoma in Utah, a case-control study. J Occup Med 27(8):580-584, 1985.

A case-control study in Utah of 228 white males who died from non-Hodgkin lymphoma between 1967-82, compared with 293 deaths from colon cancer. Statistically significant increased risk of non-Hodgkin lymphoma was found for farmers diagnosed between 1952-65 (OR 6.6) and between 1966-71 (OR 3.1). Elevated risk ratios were also found for rural versus urban residence for 1952-66 (OR 3.3), 1966-71 (OR 3.4), 1972-77 (OR 2.4), but none were significant.

Stemhagen, A., Slade, J., Altman, R., et al.: Occupational risk factors and liver cancer. Amer J Epidemol 117(4):443-454, 1983.

A case-control study in New Jersey of 265 cases of primary liver cancer, diagnosed between 1975 and 1979, compared to 265 cases selected from hospital records and 265 cases selected from state death certificate records. Statistically significant increased risk of liver cancer was found associated with agriculture (RR 2.08), agricultural production or services (RR 2.08), and for occupation of farm laborer (RR 1.89). Non-significant elevated ratios were found for horticulture (RR 1.83), and in farm owner/managers (RR 1.23).

Vineis, P., Terracini, B., Ciccone, G., et al.: Phenoxy herbicides and soft-tissue sarcomas in female rice weeders: A population-based case-referent study. Scan J Work Environ Health 13:9-17, 1986.

A case-control study in 3 rice-growing provinces of northern Italy of 68 cases (31 females) of soft-tissue sarcoma diagnosed between 1981-83, compared to 158 population-based controls (73 females). Fifteen (40.5%) of the male cases had worked in agriculture compared to 26 (30.5%) of the controls. Fourteen (45%) of the female cases had worked in agriculture compared to 21 (28.5%) of the controls. Of the living women, exposure to phenoxy herbicides increased risk (OR 2.7), but not in living men (OR 0.91).

Woods, J.S., Polissar, L., Severson, R.K., et al.: Soft tissue sarcoma and non-Hodgkin's lymphoma in relation to phenoxyherbicide and chlorinated phenol exposure in western Washington. J Nat Can Inst 78(5):899-910, 1987.

A case-control study in 13 counties of western Washington state of 128 cases of soft-tissue sarcoma, and 576 cases of non-Hodgkin lymphoma, in males aged 20 and older who were diagnosed between 1981-84, compared to 694 controls without cancer. Statistically significant increased risk for non-Hodgkin lymphoma was found for farmers (OR 1.33), forestry herbicide applicators (OR 4.80), and for those with 15 or more years of occupational exposure to phenoxyherbicides 15 years prior to their diagnosis of cancer (OR 1.71). Pesticide exposures associated with increased risk of non-Hodgkin lymphoma were DDT (OR 1.82), and lead arsenate (OR 1.60); the elevated ratio associated with exposure to chlordane (OR 1.61) was not statistically significant. No increased risk for soft-tissue sarcoma was found.

SECTION THREE: CHILDHOOD CANCER

Gold, E., Gordis, L., Tonascia, J., et al.: Risk factors for brain tumors in children. Amer J Epidemiol 109(3):309-319, 1979.

A case-control study of 84 children with primary brain cancer in Baltimore, Maryland, diagnosed between 1965-75, compared to 76 children without cancer, and 112 children with other types of cancer. Compared to the normal controls children with brain cancer were more likely to have been exposed to insecticides in the home (OR 2.3). There was no difference when compared to cancer controls.

Heinonki, K., Saloniemi, I., Saloneu, T., et al: Childhood cancer and parental occupation in Finland. J Epidem Comm Health 35:11-15, 1981.

A case-control study using birth records, of the occupations of parents of all children less than 15 diagnosed with cancer in Finland from 1959-75. Statistically significant increased risk cancer in children was associated with the mother being a farm wife (OR 2.2, 1969-75), or food worker, mainly bakers (OR 4.0, 1959-68); and for fathers' occupation in agriculture, gardening and forestry (OR 1.42).

Infante, P.F., Epstein, S.S., Newton, W.A.Jr.: Blood dyscrasias and childhood tumors and exposure to chlordane and heptachlor. Scan J Work Environ Health 4:137-150, 1978.

Reports of 5 cases of neuroblastoma diagnosed in Ohio at the same pediatric hospital in 1975. All of the children had prenatal and/or extensive environmental exposure to chlordane. Also reported was a case of aplastic anemia in a 15 year old boy with exposure to chlordane and Isotox and a 9 year old girl with leukemia with chlordane exposure only.
Infante, P.F., Newton, W.A.: Prenatal chlordane exposure and neuroblastoma (letter). New Eng J Med 240:308, 1975. The first report of the neuroblastoma cases describedabove.

Kern County Health Department: Epidemiologic study of cancer in children in McFarland, California, 1985-1986: Phase I, Statistical Considerations, Current Environment. Bakersfield, California 93305, November 1986.

The first report of the findings of an investigation an increased number of childhood cancer cases in the agricultural community of McFarland, California, with a population of approximately 6,400. From 1975 to 1985 when three cases of cancer in children less than 15 would have been expected, ten were observed. For the period of 1982 to 1985 when one case would have been expected, eight were observed.

The number and types of tumors observed and year of occurrence are: two leukemias (1978, 1978), two Wilms' tumor (1982, 1984), one astrocytoma (1982), one non-Hodgkin lymphoma (1983), one osteogenic sarcoma (1984), one fibrosarcoma (1985) and one rhabdomyosarcoma (1985).

There was also an excess of fetal and infant deaths (miscarriages and stillbirths) in the time period from 1981 to 1983.

Lowengart, R.A., Peters, J.M., Cicioni, C., et al.: Childhood leukemia and parents' occupational and home exposures. J Nat Can Inst 79(1):39-46, 1987.

A case-control study of 123 children in Los Angeles aged 10 or less with leukemia diagnosed between 1980-84, compared to 123 controls. Statistically significant increased risk of acute lymphocytic leukemia was found for children when either parent used household pesticide once a week or more (OR 3.8) or garden pesticides or herbicides once a month or more (OR 6.5); if the mother used household (OR 3.2) or garden (OR 9.0) pesticides; and if the father used household (OR 4.0) pesticides.

Non-significant increased risk was found for use of garden pesticides by the father (OR 5.0).

Pratt, C.B., Rivera, G., Shanks, E., et al.: Colorectal carcinoma in adolescents. Implications regarding etiology. Cancer 40:2464-72, 1977.

A case report of 9 children with colorectal cancer (very rare in children), diagnosed at the same hospital between 1974-75. Eight of the children were from rural areas of Mississippi, Arkansas, or Tennessee and had exposure to insecticides.

Reeves, J.D.: Household insecticide-associated blood dyscrasias in children (letter). Amer J Ped Hem/Onc 4:438-39, 1982.

A report of 15 children aged 2 to 17 years reported to blood dyscrasia clinic at Travis Air Force Base Medical Center in California. The most common exposure was to inhalation of household aerosol sprays containing DDVP-Baygon. The most prolonged exposure was in a child with juvenile chronic myelogenous leukemia whose mattress had been sprayed twice weekly for most of his life. Eleven children had aplastic anemia, and three acute lymphoblastic leukemia.

SECTION FOUR: CASE REPORTS

El Zayadi, A., Kahlis, A., El Sammy, N., et al.: Hepatic angiosarcoma among Egyptian farmers exposed to pesticides. Hepato-gatroenterol 33:148-50, 1986.

Case report of 14 patients diagnosed with angiosarcoma of the liver at the same hospital in Egypt from 1980 to 1984. Ten of the 14 had a history of 11 to 20 years (mean = 14) of chronic recurrent exposure to agricultural pesticides as sprayers of a variety of organophosphates, organochlorines, and arsenates.

Markovitz, A., Crosby, W.H.: Chemical carcinogenesis: a soil fumigant, 1,3-dichloropropene as possible cause of hematologic malignancies. Arch Inter Med 144:1409-1411, 1984.

A case report of two firemen involved in the clean up of a tank-truck spill of 1,3-dichloropropene, both of whom developed malignant lymphoma 6 years later. A case of acute myelomonocytic leukemia in a farmer sprayer was also discussed.

Prabhakar, J.M.: Possible relationship of insecticide exposure to embryonal cell cancer (letter). J Amer Med Assoc 240:288, 1978.

A report from Illinois of two cases of testicular cancer in 1976 in 30 year old men diagnosed within one year of each other. Both had worked at the same canning plant where they had occupational exposure to pesticides.

Wang, J-D, Li, W-E, Hu, F-C, et al.: Occupational risk and the development of premalignant skin lesions among paraquat manufacturers. Brit J Indus Med 44:196-200, 1987.

A prevalence study of premalignant skin lesions in 228 workers in the 28 Paraquat production and formulation plants in Taiwan. 69 workers had hyperpigmented macules and 17 hyperkeratosis. 80% (n = 28) of the workers in bipyridine centrifugation and 67% (n = 38) of the workers in bipyridine crystallization developed hyperpigmented macules and hyperkeratosis.

Weininger, R.B., Davis, G., Hawks, C.D.: Herbicides and cancer (letter). J Amer Med Assoc 257:2292, 1987.

A report of 92 cases of non-Hodgkin lymphoma diagnosed from 1975-85 in upstate New York. The incidence of 15.3/100,000 (not age-adjusted), compared to SEER data (Surveillance Epidemiology and End Results) of 10.1/100,000 for the U.S. This elevated ratio of 1.51 was stated to support the Hoar study (vide supra), but no data was reported regarding whether or not herbicide exposure was a risk factor in the cases.

(103) Wasserstrom, Robert F. and Richard Wiles. 1985. *Field Duty: U.S. Farmworkers and Pesticide Safety.* Washington, DC: World Resources Institute.

(104) Wester, R.C., and H.I. Maibach. 1985. "In Vivo Precutaneous Absorption and Decontamination of Pesticides in Humans." *Journal of Toxicology and Environmental Health* 15: 25–37.

(105) Whorton, M.D. and D.L. Obrinsky. 1983. "Persistence of Symptoms After Mild to Moderate Acute Organophosphate Poisoning Among 19 Farm Field Workers." *Journal of Toxicology and Environmental Health* 11: 374–354.

(106) Wolfe, H.R. 1972. "Protection of Individuals Who Mix or Apply Pesticides in the Field." In: *Proceedings of the National Conference on Protective Clothing and Safety Equipment for Pesticide Workers.* Washington, DC: EPA Federal Working Group on Pest Management.

(107) Wolfe, H.R. 1973. "Workers Should Be Protected from Pesticide Exposure." *Weeds, Trees and Turf,* Vol. 12, No. 4.

(108) Wolfe, H.R., W.F. Durham, and J.F. Armstrong. 1967. "Exposure of Workers to Pesticides." *Archives of Environmental Health* 14: 622–632.

(109) Wolfe, H.R., D.C. Staiff, J.F. Armstrong, and S.W. Comer. 1972. "Exposure of Spraymen to Pesticides." *Archives of Environmental Health* 25: 29–31.

(110) Yeary, Roger A. 1986. Chemlawn Services Corporation. Personal communication.

(111) Zweig, Gunter, J.D. Adams, and J. Blondell. 1980. "Minimizing Occupational Exposure to Pesticides: Federal Reentry Standards for Farm Workers (Present and Proposed)." *Residue Reviews* 75: 103–112.

(112) Zweig, Gunter, R. Gao, and W.J. Popendorf. 1983. "Simultaneous Dermal Exposure to Captan and Benomyl by Strawberry Harvesters." *Journal of Agricultural and Food Chemistry* 31: 1109–1113.

(113) Department of Labor, Occupational Safety and Health Administration. 1987. "Field Sanitation; Final Rule." 52 FR 16050.

(114) Ames, R.G., S.K. Brown, J.W. Stratton, D.C. Mengle, E. Kahn, R.J. Jackson. 1987. "Cholinesterase Activity Depression Among California Pesticide Applicators: Results from the 1985 Cholinesterase Monitoring Program." California Department of Health Services.

IX Regulatory Requirements

A. Executive Order 12291

Under Executive Order 12291, EPA must judge whether a regulation is "major" and must submit its analysis supporting its findings to the Office of Management and Budget (OMB) for review. The Agency has determined that this proposed revision of Part 170 is a major regulation as defined by E.O. 12291. A regulatory impact analysis has been developed and submitted to OMB as required. This document is available for public inspection at the address given at the beginning of this Federal Register notice. A summary follows.

EPA proposes to revise 40 CFR Part 170 to specify requirements that would mitigate the risks from exposure to pesticides and their residues by pesticide handlers and agricultural workers. EPA has developed, considered and analyzed many approaches to mitigating these risks and proposes to issue regulations covering reentry intervals, personal protective equipment, training, notification, decontamination, emergency medical duties and cholinesterase monitoring.

The proposed regulations would serve to protect the hired labor force of 2.3 million persons exposed either directly or indirectly to pesticides as a result of their occupations on farms, in forests, in nurseries, or in greenhouses. This workforce includes 1.8 million hired farmworkers, 150 thousand commercial pesticide applicator personnel, 7.2 thousand workers in forestry, 125 thousand workers in nurseries and 175 thousand workers in greenhouses.

The total incremental cost (not including costs already incurred) in the first year of this proposed regulation, given existing regulations at the State and Federal level, is an estimated $170.0 million, representing an average cost per worker protected of $74. Total incremental costs attributable to specific requirements ranged from $6.0 million for emergency medical duties (an average of $2.22 per worker) to $35.4 million for cholinesterase monitoring (an average of $15.39 per worker). These costs would affect sectors of the agricultural economy according to their intensity of pesticide use and types of pesticides used. The estimated first year nonincremental cost by sector ranges from $167 for an average feed/grain farm to $611 for an average vegetable farm to $3,515 for an average greenhouse to $8,910 for an average commercial pesticide application firm.

The benefits that would accrue to pesticide handlers and field workers from the proposed regulation would include reduction in lost time from the workforce, reduced medical expenses and overall increased productivity from having a workforce less affected by pesticide exposure. While these benefits cannot be quantified, the Agency believes that these types of benefits would be substantial.

B. Regulatory Flexibility Act

This rulemaking has been reviewed under the Regulatory Flexibility Act of 1980 (Pub. L. 96–354; 94 Stat. 1164; 5 U.S.C. 601–612). The results of that review have been incorporated into the regulatory impact analysis. The proposed regulation was found to affect farms in all size categories. The vast majority of farms are small businesses. The Agency is seeking further information on the impact of this proposal on small agricultural establishments.

Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this proposed rule under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, and has assigned OMB control number 2070–A326.

Public reporting burden for this collection of information is estimated to average 6.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Desk Officer for EPA." The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

List of Subjects in 40 CFR Parts 156 and 170

Environmental protection, Labeling, Pesticides and pests, Intergovernmental relations, Occupational safety and health.

Dated: June 28, 1988.

A. James Barnes,

Acting Administrator.

Therefore, it is proposed that Chapter I of Title 40 be amended as follows:

PART 156—LABELING REQUIREMENTS FOR PESTICIDES AND DEVICES

1. In Part 156:

a. The authority citation continues to read as follows:

Authority: 7 U.S.C. 136–136y.

b. By adding new Subpart K to read as follows:

Subpart K—Agricultural Worker Protection Statements

Sec.

156.200 Scope and applicability.
156.202 Authority of the Agency.
156.205 Reference statement.
156.206 General statements.

EXHIBIT 2

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Sec.
156.210 Reentry statements.
156.212 Posting statements.
156.215 General personal protective equipment statements.
156.216 Personal protective equipment for handlers.
156.217 Personal protective equipment for early reentry workers.

Subpart K—Agricultural Worker Protection Statements

§ 156.200 Scope and applicability.

(a) *Scope.* This subpart prescribes labeling requirements for the protection of agricultural pesticide handlers and workers in pesticide-treated areas. The statements incorporate by reference the worker protection standards of Part 170 of this chapter. This subpart also prescribes reentry interval and personal protective equipment statements which must be placed on labeling.

(b) *Applicability.* (1) The requirements of this subpart apply to each pesticide product that bears directions for use or whose labeling reasonably permits use in the production of any agricultural plant on or in any farm, forest, nursery, or greenhouse.

(2) The requirements of this subpart do not apply to a product that bears directions solely for uses exempted by § 170.3(b)(2) of this chapter.

§ 156.202 Authority of the Agency.

The Agency, upon its own initiative or upon application by a registrant or other person in accordance with §§ 156.210, 156.216 or 156.217, may modify or waive the requirements of this subpart, or may permit alternative labeling statements to be used.

§ 156.205 Reference statement.

The label of each product shall bear the reference statement: "On or in farms, forests, nurseries, or greenhouses, use only in accordance with Part 170 of Title 40, Code of Federal Regulations, EPA regulations for the protection of agricultural workers and pesticide handlers. These regulations are part of the labeling of this product and should be obtained by the user. Some States have more restrictive worker protection requirements; consult your State agency responsible for pesticide regulation for information on your State's requirements."

§ 156.206 General statements.

(a) The labeling of each product shall bear the statement: "Do not apply this product in a way that will contact unprotected workers, either directly or through drift. Only protected handlers may be in the area during application."

(b) If the product is assigned to Toxicity Category I or II in accordance with § 162.10(h)(1) of this chapter:

(1) The signal word shall appear in Spanish as well as English.

(2) The statement, "Si usted no lee ingles, no use este producto hasta que el etiqueta haya sido explicado ampliamente," shall appear on the label in close proximity to the Spanish signal word. [Translation: If you cannot read English, do not use this product until the label has been fully explained to you.]

(c) If the product contains an organophosphate or N-methyl carbamate, or is a fumigant, the label shall so state. The identification may appear as part of the product name, as part of the product type identification or as a separate statement. It may not appear only within the ingredients statement.

(d) If the product is required to bear the skull and crossbones on the label, the product labeling shall also bear the statement: "Visual or voice contact must be made at least every two hours with any person who is mixing, loading, or applying this product."

(e) If the product is a fumigant, the product labeling shall bear the statement: "Visual contact must be maintained by an observer at all times with any person who is applying this product in a greenhouse or similar structure, or who enters the greenhouse before the reentry interval has expired. The observer must have immediate access to the same personal protective equipment required for an applicator of this product."

§ 156.210 Reentry statements.

(a) *Requirement.* Each product shall bear reentry statements as prescribed by this section. The statements consist of:

(1) The prohibition against immediate reentry specified in paragraph (c)(1) of this section.

(2) The reentry statement specified in paragraph (c)(2) of this section, if applicable.

(3) The interim or product-specific reentry interval in accordance with paragraph (d) or (e) of this section, if applicable.

(b) *Location of reentry statements.* The statements required by paragraph (a) (1) and (2) of this section shall be located in the use directions of the product labeling under the heading "REENTRY." If the statements are not located on the label of the product but are in supplemental labeling accompanying the product during distribution or sale, the human hazard precautionary section of the label shall contain a reference statement to the reentry statements elsewhere. The required statements may be combined to avoid redundancy as long as the requirements and conditions under which they apply are clearly identified. The interim or product specific reentry interval required by paragraph (a)(3) of this section shall be associated on the labeling with each crop or use to which it applies, immediately preceded or followed by the words "Reentry Interval" (or the letters "REI" if previously defined in the labeling). If the same reentry interval applies to all crops and uses, the reentry interval may be listed once together with other statements under the heading "REENTRY."

(c) *General reentry statements.* (1) Each product shall bear the statement, "Do not enter or allow entry into treated areas until [sprays have dried/dusts have settled/vapors have dispersed, as applicable] to perform hand labor tasks. A person may enter the area to perform other tasks only if the person is wearing the personal protective equipment listed on the label for a pesticide handler."

(2) Each product for which an interim or product-specific reentry interval has been established shall bear the statement, "After [sprays have dried/dusts have settled/vapors have dispersed, as applicable] do not enter or allow entry into the treated area until the reentry interval has expired, unless the person entering the treated area is wearing the personal protective equipment listed on the label for early reentry."

(d) *Product specific reentry intervals.* A product-specific reentry interval is established based on reentry protection data submitted in accordance with § 158.140 of this chapter and Subdivision K of the Pesticide Assessment Guidelines. A product specific reentry interval shall supersede any interim reentry interval applicable to the product.

(e) *Interim reentry intervals*—(1) *Existing interval.* An interim reentry interval established by the Agency prior to the effective date of this subpart will continue to apply unless a longer interim reentry interval is required by paragraph (e)(2) of this section. However, if reentry protection data were required at the time of the establishment of the existing interval and flagged for expedited review, the existing interval will continue to apply even if a longer interim reentry interval is required by paragraph (e)(2) of this section.

(2) *Interval based on acute toxicity of the active ingredient.* (i) If there is no existing reentry interval, or if an existing reentry interval is superseded under

paragraph (e)(1) of this section, an interim interval shall be established, based upon the acute toxicity of the active ingredient(s) in the product. The Toxicity Category of each active ingredient in the product shall be determined based upon a comparison of data on the acute dermal toxicity, eye irritation effects, or skin irritation effects of the ingredient to the criteria of § 162.10(h)(1) of this chapter. If no dermal toxicity data are available, data on oral toxicity shall also be considered in this comparison.

(ii) If the product contains a sole active ingredient which is in Toxicity Category I and which belongs to the organophosphate or N-methyl carbamate chemical class, the interim reentry interval shall be 48 hours.

(iii) If the product contains any other sole active ingredient which is in Toxicity Category I, the interim reentry interval shall be 24 hours.

(iv) If the product contains a sole active ingredient which is in Toxicity Category II and which belongs to the organophosphate or N-methyl carbamate chemical class, the interim reentry interval shall be 24 hours.

(v) If the product contains any other sole active ingredient which is in Toxicity Category II, there shall be no interim reentry interval.

(vi) If the product contains only active ingredients which are in Toxicity Category III or IV, there shall be no interim reentry interval.

(vii) If the product contains more than one active ingredient, the interim reentry interval shall be the longest interval among the active ingredients determined by the criteria in paragraphs (e)(2) (ii) through (vi) of this section.

(f) *Modification based upon Special Review.* If the Agency concludes, in accordance with § 154.25(c) of this chapter, that a pesticide should be placed in Special Review because of a determination that it meets or exceeds the criteria of § 154.7(a) (1) or (2) of the chapter for human health effects, the Agency will at that time also determine an appropriate interim reentry interval.

(g) *Modification based upon submission of data.* The Agency may, based upon data submitted by any person demonstrating that exposure levels resulting from the application of a pesticide product warrant a shorter or longer reentry interval than that required by this section, modify the reentry interval on a case-by-case basis. Supporting data may be in accordance with Part 158 of this chapter and Subdivision K of the Pesticide Assessment Guidelines, or other medical, epidemiological, or health effects studies.

§ 156.212 Posting statements.

(a) *Requirement*—(1) Each product that has a reentry interval of greater than 48 hours for any crop or use site shall bear the statement "Areas treated with this product are subject to posting."

(2) Each product that has a reentry interval of 48 hours or less, and that either bears directions for use in greenhouses or nurseries or whose labeling reasonably permits use in greenhouses or nurseries shall bear the statement "If this product is used in nurseries or greenhouses, treated areas must be posted before application and must remain posted until the reentry interval has expired."

(b) *Location.* The posting statement required by paragraph (a) (1) or (2) of this section may be located on the product labeling with the specific crops or sites to which it applies or, if it applies to more than one crop or site, may be located in the general use directions.

§ 156.215 General personal protection equipment statements.

(a) *Requirement.* Each product shall bear the personal protective equipment (PPE) statements prescribed by §§ 156.216 and 156.217. PPE requirements for a product established prior to the effective date of this subpart shall use the more protective of the requirements for each area of the body. However, any existing label prohibition on the use of gloves or boots overrides the corresponding requirement of this subpart.

(b) *Location of PPE statements.* PPE statements shall be located in the use directions of the product labeling under the heading "PERSONAL PROTECTIVE EQUIPMENT." If the statements are not located on the label of the product but are in supplemental labeling accompanying the product during distribution or sale, the human hazard precautionary section of the label shall contain a reference statement to the PPE statements elsewhere. The required statements may be combined to avoid redundancy as long as the requirements and conditions under which they apply are clearly identified.

§ 156.216 Personal protective equipment for handlers.

(a) *Minimum PPE requirements.* The table in paragraph (b) of this section sets out the minimum PPE requirements for pesticide handlers and early reentry workers entering treated areas before sprays have dried, dusts have settled, or vapors have dispersed, based upon the acute toxicity of the formulated product by route of exposure. The labeling shall specify the PPE for each route of exposure, based upon data on the acute toxicity of the product by that route of exposure. If data to determine the acute toxicity of the product by an applicable route of exposure are lacking, the Toxicity Category of the formulated product as a whole shall be used to determine PPE required for that route of exposure.

(b) *Table.*

MINIMUM PERSONAL PROTECTIVE EQUIPMENT AND NORMAL WORK ATTIRE FOR PESTICIDE HANDLERS AND WORKERS REENTERING TREATED AREAS BEFORE SPRAYS HAVE DRIED

Route of exposure	Formulated product toxicity category			
	I	II	III	IV
Dermal or skin irritation potential [1]	Protective suit [2]; Chemical-resistant gloves [3]; Chemical-resistant shoes, shoe covers, or boots.	Protective suit; Chemical-resistant gloves; Chemical-resistant shoes, shoe covers, or boots.	Normal work attire [4]; Chemical-resistant gloves.	Normal work attire.
Inhalation	Respiratory protection device [5]	Respiratory protection device	No minimum [6]	No minimum.
Eye irritation potential	Goggles or face shield	Goggles or face shield	No minimum	Do.

[1] If dermal toxicity and skin irritation potential are known to be in different Toxicity Categories, the more toxic of the two shall be used.

[2] A protective suit is a loose-fitting one-or two-piece garment, such as a fabric coverall, that is worn over normal work attire and covers at a minimum the entire body except for the head, hands and feet.

[3] "Chemical-resistant" material allows no measurable movement of pesticide through the material during use.

[4] Normal work attire consists at a minimum of long pants and long sleeved shirt, shoes and socks.

[5] Respiratory protection device approved by the National Institute of Occupational Health and Safety (NIOSH) and the Mine Safety and Health Administration (MSHA) for the intended pesticide use.

[6] Although no minimum PPE is required by this Section for this Toxicity Category and route of exposure, PPE may be required by the Agency under these circumstances on a product-specific basis.

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(c) *Modifications based upon exposure pattern.* In addition to the minimum requirements given in paragraph (b) of this section, the following PPE instructions (or substitutions, as applicable) shall be included on the labeling of each product that is in Toxicity Category I or II by dermal toxicity or skin irritation potential.

(1) *Mixing/loading.* Unless a chemical-resistant protective suit is otherwise required, the labeling shall specify that during mixing and loading a chemical-resistant apron shall be worn in addition to other PPE.

(2) *Closed system mixing/loading.* If the product may be mixed or loaded by a closed system that eliminates open atmospheric contact with the pesticide and its rinsate during transfer from the original container to the application equipment, the labeling may specify that under these circumstances:

(i) Normal work attire, chemical-resistant apron and chemical-resistant gloves may be worn in lieu of other PPE;

(ii) If pressure is used during closed system mixing or loading, goggles or a face shield shall be worn in addition to other PPE; and

(iii) All other PPE for a handler shall be available nearby for the mixer/loader's use in case of equipment failure or other emergency.

(3) *Overhead exposure.* If the product may be applied in a manner such that overhead exposure to the pesticide may occur, the labeling shall specify that a chemical-resistant hat with a wide brim or a hood shall be worn in addition to other PPE.

(4) *Enclosed cab application.* If the product may be applied using an enclosed cab with positive pressure ventilation, the labeling may specify that under these conditions normal work attire may be worn in lieu of PPE, which shall be available in the cab for the applicator's use when leaving the cab while still in the treated area.

(5) *Aerial application.* If the product may be aerially applied, the labeling may specify that:

(i) If an enclosed cockpit is used, normal work attire may be worn in lieu of other PPE, and chemical-resistant gloves shall be available in the cockpit for the applicator's use when leaving an aircraft that is contaminated with pesticide residues.

(ii) If a nonenclosed cockpit is used, chemical-resistant shoes, shoe coverings or boots may be omitted and a helmet with a visor may be worn in lieu of a hat and goggles or face shield.

(6) *Equipment cleaning and repair.* The labeling shall specify that during cleaning and repair of mixing, loading and application equipment, a chemical-resistant apron, chemical-resistant gloves and chemical-resistant shoes, shoe coverings or boots shall be worn.

(d) *Modification based upon the toxicity of the product as diluted for use.* If the labeling requires the product to be diluted by the user before application, the registrant may propose to modify the PPE requirements of paragraph (b) or (c) of this section for all handlers except mixer/loaders. In support of such proposal, the registrant shall submit or cite data on the toxicity of the product as diluted for use by the routes of exposure for which modification of PPE is sought. The PPE requirements for all handlers except mixer/loaders may then be based upon the data submitted for the product as diluted for use.

(e) *Modification based upon Special Review.* If the agency concludes in accordance with § 154.25(c) of this chapter that a pesticide should be placed in Special Review because of a determination that the pesticide meets or exceeds the criteria of § 154.7(a)(1) or (2) of this chapter for human health effects, the Agency will at that time also determine appropriate interim PPE for handlers.

(f) *Modification based upon data submission.* The Agency may, based upon data submitted by any person demonstrating that exposure levels resulting from handler activities warrant different minimum PPE requirements than required by this section, modify the minimum PPE requirements on a case-by-case basis. Supporting data may be either data required by Subdivisions U or K of the Pesticide Assessment Guidelines or other medical, epidemiological, or health effects data.

§ 156.217 Personal protective equipment for early reentry workers.

(a) *Minimum PPE requirements.* The table in paragraph (b) of this section sets out the minimum PPE requirements for early reentry workers entering treated areas after sprays have dried, dusts have settled or vapors have dispersed and before the expiration of the reentry interval, based upon the acute toxicity of the active ingredient by route of exposure. The labeling shall specify the PPE for each route of exposure, based upon data on the acute toxicity of the active ingredient by that route of exposure. If data to determine the acute toxicity of the active ingredient by any route of exposure are lacking, the Toxicity Category of the active ingredient as a whole shall be used to determine PPE required for that route of exposure.

(b) *Table.*

MINIMUM PERSONAL PROTECTIVE EQUIPMENT FOR WORKERS REENTERING TREATED AREAS AFTER SPRAYS HAVE DRIED AND BEFORE THE EXPIRATION OF THE REENTRY INTERVAL

Route of exposure	Active ingredient toxicity category			
	I	II	III	IV
Dermal or skin irritation potential [1]	Protective suit,[2] Chemical-resistant gloves;[3] Chemical-resistant shoes, shoe covers, or boots	Protective suit, Chemical-resistant gloves, Chemical-resistant shoes, shoe covers, or boots.	No minimum [4]	No minimum
Eye irritation potential	Goggles or face shield	Goggles or face shield	No minimum	Do.

[1] If dermal toxicity and skin irritation potential are known to be in different Toxicity Categories, the more toxic of the two shall be used.

[2] A protective suit is a loose-fitting one- or two-piece garment, such as a fabric coverall, that is worn over normal work attire and covers at a minimum the entire body except for the head, hands and feet.

[3] "Chemical-resistant" material allows no measurable movement of pesticide through the material during exposure.

[4] Although no minimum PPE is required by this section for this Toxicity Category and route of exposure, PPE may be required by the Agency under these circumstances on a product-specific basis.

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(c) *Modification based upon Special Review.* If the Agency concludes, in accordance with § 154.25(c) of this chapter, that a pesticide should be placed in Special Review because of a determination that the pesticide meets or exceeds the criteria of § 154.7(a)(1) or (2) of this chapter, for human health effects, the Agency will at that time also determine appropriate interim PPE for early reentry workers.

(d) *Modification based upon data submission.* The Agency may, based upon data submitted by any person demonstrating that exposure levels resulting from the early reeentry activities warrant different minimum PPE requirements than required by this section, modify the minimum PPE requirements on a case-by-case basis. Supporting data may be either data required by Subdivisions U or K of the Pesticide Assessment Guidelines or other medical, epidemiological or health effects data.

2. By revising Part 170 to read as follows:

PART 170—WORKER PROTECTION STANDARDS FOR AGRICULTURAL PESTICIDES

Subpart A—General

Sec.

170.1 Purpose and overview.
170.3 Applicability.
170.5 Definitions.
170.7 Duties of persons covered under this part.
170.9 Violations of this part.

Subpart B—Standards for Pesticide Handlers and Early Reentry Workers

170.10 Applicability.
170.12 Training.
170.14 Access to labeling information.
170.16 Duties related to personal protective equipment.
170.18 Decontamination.
170.20 Cholinesterase monitoring.

Subpart C—Common Standards for Workers on or in Farms Forests, Nurseries and Greenhouses

170.30 Applicability.
170.32 General pesticide safety information.
170.34 Emergency duties.
170.36 Precautions during application of pesticides.
170.38 Decontamination

Subpart D—Special Standards for Workers on Farms and In Forests

170.40 Applicability.
170.42 Information about pesticide applications.
170.44 Posting.
170.46 Reentry.

Subpart E—Special Standards for Workers in Nurseries

170.50 Applicability.
170.52 Information about pesticide applications.
170.54 Posting.
170.56 Reentry.

Subpart F—Special Standards for Workers in Greenhouses

170.60 Applicability.
170.62 Information about pesticide applications.
170.64 Posting.
170.66 Reentry.

Authority: 7 U.S.C. 136w.

Subpart A—General

§ 170.1 Purpose and overview.

(a) *Purpose.* The purpose of this part is to set standards, to be incorporated into pesticide labeling, designed to help protect persons who work on or in farms, forests, nurseries, or greenhouses from injury or disease that might result from occupational exposure to pesticides or pesticide residues. This part requires workplace practices designed to lessen the risk of exposure and to deal with exposures that may occur.

(b) *Overview of the organization of this part.* This part consists of six subparts:

(1) Subpart A describes the coverage of this part, defines terms used throughout this part, and describes generally the duties of persons and the conditions under which these persons are subject to penalties for failure to perform the duties.

(2) Supbart B contains standards for the protection of handlers and early reentry workers on all use sites.

(3) Subpart C contains standards for the prorection of all workers on all use sites.

(4) Subpart D contains standards for the protection of all workers on farms and in forests.

(5) Subpart E contains standards for the protection of all workers in nurseries.

(6) Subpart F contains standards for the protection of all workers in greenhouses.

Pesticide labeling requirements that are related to this part are contained in Subpart K of Part 156 of this chapter.

§ 170.3 Applicability.

(a) *General.* The requirements of this part apply if any pesticide to which this part applies (see paragraph (b) of this section) is used on or in any farm, forest, nursery, or greenhouse to which this part applies (see paragraph (c) of this section).

(b) *Pesticides to which this part applies*—(1) *General rule.* This part applies to any pesticide product whose label bears directions for use in the production of any agricultural plant and contains either the reference statement set forth in § 156.205 of this chapter or any other reference to this part.

(2) *Exceptions.* This part does not apply to any pesticide to the extent that it is used or applied only:

(i) For public mosquito abatement or similar public pest control programs sponsored by government entities, not including such programs that take place entirely on property owned or leased by the sponsoring governmental entity;

(ii) On livestock or other animals;

(iii) On golf courses or on turf areas that are not located on turf or sod farms or in greenhouses;

(iv) In such structures as malls, atriums, or office buildings where agricultural plants are present primarily for aesthetic or climatic modifications;

(v) In and around habitations, including, but not limited to, on noncommercial crop or ornamental gardens, in non-commercial greenhouses, or on lawns, shrubs, or trees;

(vi) By injection directly into agricultural plants (however, this part does apply to "hack and squirt", "frill and spray" and other techniques that do not involve direct injection);

(vii) In a manner which is not directly related to the production of agricultural plants, including, but not limited to, structural pest control, control of vegetation along rights-of-way and in other noncrop areas, control of vertebrate pests, and attractants and repellents in containers;

(viii) After harvest on the harvested portions of agricultural plants; or

(ix) For research purposes by any person, if the purpose of the research is primarily to determine the properties or effects of pesticides and if all handling activities and hand labor tasks associated with such research are performed by or under the direct supervision of the person conducting the research.

(c) *Sites to which this part applies.* This part applies to any farm, forest, nursery, or greenhouse on or in which:

(1) Any worker performs any work related to the production of agricultural plants; and

(2) Any pesticide to which this part applies is used in the production of agricultural plants.

(d) *Effect of this part on compliance with pesticide labeling statements by certain persons.* Although an owner of a farm, forest, nursery or greenhouse and immediate family members of an owner are not considered to be workers for purposes of this part, such persons are required to comply with pesticide

labeling statements pertaining to reentry and personal protective equipment.

§ 170.5 Definitions.

Terms used in this part have the same meanings as they do in the Federal Insecticide, Fungicide and Rodenticide Act, as amended. In addition, as used in this part, the following terms shall have the meanings stated below:

"Agricultural plant" means any agricultural, ornamental, or forestry plant, or part thereof. Agricultural plants include, but are not limited to, food, feed and fiber plants, trees, turf, flowers, shrubs, and seedlings.

"Chemical-resistant," when applied to any material, means that there will be no measureable movement of the pesticide product through the material during the period of use.

"Early reentry worker" means any worker who is directed to enter a reentry-restricted area prior to the expiration of any reentry interval that applies to that area.

"Employer" means any person who employs any worker or handler, for any type of compensation, to perform tasks relating to the production of agricultural plants.

"Farm" means any area that is used, in whole or in part, for the production of agricultural plants, that is not a forest, nursery or greenhouse.

"Forest" means any area containing trees and associated vegetation used, in whole or in part, for the commercial production of wood fiber or timber products. The term does not include trees located in any nursery.

"Greenhouse" means any structure or space that is enclosed with nonporous covering, that is of sufficient size to permit worker entry, and that is used, in whole or in part, for the production of agricultural plants. Such structures include greenhouses, polyhouses, mushroom houses, rhubarb houses and similar structures.

"Hand labor tasks" means harvesting, detasseling, thinning, weeding, topping, planting, sucker removal, pruning, disbudding, roguing, or any other task that causes any worker to come into substantial contact with surfaces (such as plants, plant parts or soil) that may contain pesticide residues.

"Handler" or "pesticide handler" means any worker who: mixes, loads, transfers, transports, applies or disposes of pesticides; acts as a flagger; or cleans, adjusts, or repairs contaminated parts of mixing, loading, or application equipment. The term does not include any worker who transports pesticides in containers that have never been opened.

"Normal work attire" means, at a minimum, long pants, long-sleeved shirt, shoes, and socks.

"Nursery" means any property that is not enclosed with nonporous covering and that is used, in whole or in part, for the production of agricultural plants which will be used in their entirety in another location.

"Owner" means any person who has a present possessory interest (fee, leasehold, or other) in land on which a farm, forest, greenhouse or nursery covered by this part is located, by virtue of which interest the person has the legal right to prevent other persons from entering the land or to require them to leave it.

"Person" means any individual, partnership, association, or corporation, or any organized group of persons, whether incorporated or not.

"Personal protective equipment" means devices and clothing that are worn over, in place of, or in addition to normal work attire for the purpose of protecting the human body from contact with pesticides or pesticide residues.

"Pesticide-treated area" means any area to which a pesticide has been directed.

"Potable water" means water that meets the standards for drinking purposes established by State or local authority having jurisdiction or water that meets the National Interim Primary Drinking Water Standards, set forth in Part 141 of this chapter.

"Protective suit" means any loose-fitting, one- or two-piece garment that is worn over normal work attire and covers at a minimum the entire body except for the feet, hands, and head.

"Reentry interval" means the period of time after the end of a pesticide application on, in, or near an area during which entry into the area is restricted, including at a minimum the period of time required for sprays to dry, dusts to settle and vapors to disperse.

"Reentry-restricted area" means the pesticide-treated area and any additional area into which entry is restricted during the reentry interval because of drift or overspray of pesticides beyond the pesticide-treated area.

"Supervisor" means any person who directly or indirectly exercises control and direction over any worker.

"Worker" means any person employed for any type of compensation to perform tasks relating to the production of agricultural plants. The term does not include an owner of a farm, forest, nursery or greenhouse or the immediate family of an owner, the immediate family including only an owner's spouse, children, stepchildren, foster children, parents, stepparents, foster parents, brothers, and sisters.

§ 170.7 Duties of persons covered under this part.

(a) *Duties of owner.* The owner of any farm, forest, nursery or greenhouse shall:

(1) Assure that any pesticide that is used on such property is used in a manner that is consistent with the labeling of the pesticide including the requirements of this part.

(2) Assure that any worker who works on such property receives the protections required by this part.

(3) Provide, to each person who performs or supervises any work on such property, information and directions sufficient to assure that each worker on such property receives the protections required by this part. Such information and directions shall include where and when pesticides will be or have been applied, which areas have restrictions on reentry, and which persons are responsible for actions required to comply with this part.

(4) Require each supervisor of any worker on such property to assure compliance by the worker with the provisions of this part and to assure that the worker receives the protections required by this part.

(b) *Duties of other persons.* Each person who performs or supervises any work related to the production of agricultural plants or the use of any pesticide on or in any farm, forest, nursery or greenhouse shall:

(1) Comply with all instructions and directions given by the owner or other persons acting for the owner, or by the person's employer, that are intended to assure compliance with this part.

(2) Assure that any worker the person supervises receives the protections required by this part.

(3) Assure that any pesticide the person uses or supervises the use of is used in a manner that is consistent with the labeling of the pesticide, including the requirements of this part.

(c) *Prohibited actions.* No owner, employer, or supervisor shall allow or direct a worker to violate any requirement of this part, or take any action intended to prevent or discourage any worker from complying or attempting to comply with any requirement of this part. However, this part does not prohibit an owner, employer, or supervisor from discharging or otherwise disciplining any worker for failure to comply with instructions to take an action required by this part or to refrain from an action prohibited by this part.

§ 170.9 Violations of this part.

(a) Under FIFRA section 12(a)(2)(G) it is unlawful for any person "to use any registered pesticide in a manner inconsistent with its labeling." EPA interprets the term "to use any registered pesticide" as referring to, among other things, application, arranging for or allowing application, making necessary preparations for application, or supervising application of a pesticide, or taking any required postapplication actions. Each person who uses a pesticide must not use it in a manner inconsistent with its labeling, including the requirements of this part.

(b) A person who has a duty under this part (see § 170.7) and who fails to perform that duty violates FIFRA section 12(a)(2)(G) and is subject to a civil or criminal penalty under FIFRA section 14.

(c) FIFRA section 14(b)(4) provides that a person is liable for a penalty under FIFRA if another person employed by or acting for him violates any provision of FIFRA. The term "acting for" includes both employment and contractual relationships.

(d) Notwithstanding paragraphs (a) through (c) of this section, if a person who is under contract to perform services on the property of an owner or who is the employee of such a contractor, violates any requirement of this part, the owner of the property shall not be considered to have committed an unlawful act solely because of such violation if the violation did not occur on the property of the owner.

(e) The fact that a person covered under this part failed to obey instructions to take an action required by this part (or instructions to refrain from an action prohibited by this part) shall not preclude enforcement action against other persons who have duties under this part. However, any such non-compliance that is directly related to a violation of this part shall be taken into account in administrative decisions concerning initiation of enforcement action and determination of penalties with regard to such violation.

Subpart B—Standards for Pesticide Handlers and Early Reentry Workers

§ 170.10 Applicability.

This subpart contains standards to protect pesticide handlers and early reentry workers for pesticides used on or in farms, forests, nurseries and greenhouses. In this subpart, the word "worker" refers only to pesticide handlers and early reentry workers.

§ 170.12 Training.

(a) *General.* Each worker shall be trained under the provisions of this section, unless such person is a certified commercial or private applicator under Part 171 of this chapter.

(b) *Training programs.* (1) A trainer shall present general information on pesticides to workers orally or audiovisually and shall answer questions that arise. The trainer shall be a certified commercial or private applicator under Part 171 of this chapter or otherwise designated by a State or Federal agency as a trainer of certified applicators.

(2) General information on pesticides shall include at a minimum the following:

(i) Format and meaning of information contained on pesticide labels and in supplementary labeling, including safety information such as human hazard precautionary statements;

(ii) Acute and chronic hazards of pesticides;

(iii) Common signs and symptoms of pesticide poisoning, including signs and symptoms of cholinesterase inhibition;

(iv) Routes through which pesticides can enter the body;

(v) Appropriate use of personal protective equipment;

(vi) Emergency first aid for pesticide injuries or poisonings;

(vii) How to find emergency medical care;

(viii) Safety requirements for handling, transporting, storing, and disposing of pesticides, including procedures for spill cleanup;

(ix) Safety requirements for routine washing of face and hands before eating, drinking, using the toilet, or using gum or tobacco;

(x) Safety requirements for whole body decontamination in an emergency exposure situation and at the end of the handling activities, including instructions not to wear home or take home contaminated personal protective equipment;

(xi) (If applicable) Information that pesticides are applied in irrigation water in some areas. Warnings not to enter such areas when the irrigation system is operating and until foliage has dried and soil surface water has disappeared. Instructions not to drink, bathe in, use, play in, or enter the water in furrows, puddles, ponds, canals, or ditches associated with an irrigation system used to apply pesticides;

(xii) Basic information on the safe and appropriate operation of mixing, loading, and application equipment;

(xiii) Environmental concerns such as drift, runoff, and wildlife hazards.

(c) *State requirements.* (1) A State may impose additional requirements for training consistent with those set forth in this section.

(2) A State shall petition the Agency for approval of any training requirement inconsistent with those set forth in this section.

§ 170.14 Access to labeling information.

Any information from the labeling of any pesticide that is being or is scheduled to be handled, or the labeling itself, shall be provided upon request to any handler of that pesticide.

§ 170.16 Duties related to personal protective equipment.

(a) *Provision.* When personal protective equipment (PPE) is required by the labeling of any pesticide for any worker, such PPE shall be provided in clean and operating condition to such worker.

(b) *Use.* (1) All required PPE shall be used correctly for its intended purpose and in accordance with any manufacturer's instructions.

(2) No worker shall be allowed or directed to perform any task requiring the use of a chemical-resistant protective suit when conditions such as temperature, humidity and length of time required to complete the task might be expected to cause heat prostration or other heat-induced illness.

(3) A clean place away from pesticide storage and pesticide use areas shall be provided where workers may put on PPE at the start of any exposure period, store any personal clothing not in use, and change out of PPE at the end of any exposure period. Soap, towels, and a sufficient amount of potable water for workers to wash after removing PPE shall be available at the end of any exposure period.

(4) When not in use, PPE shall be stored away from pesticide-contaminated areas and separately from personal clothing.

(5) No worker shall be allowed or directed to wear home or take home pesticide-contaminated PPE.

(c) *Cleaning and maintenance.* (1) All PPE shall be thoroughly washed with detergent and hot water, or cleaned according to manufacturer's instructions, after any day on which it is used and before it may be reused. All PPE shall be thoroughly dried before being stored or shall be put in a well ventilated place to dry.

(2) Any person responsible for cleaning the PPE shall be informed that such equipment may be contaminated with pesticides and that it should be

kept and washed separately from any other clothing or laundry.

(3) Any PPE that cannot be properly cleaned shall be disposed of in accordance with any applicable Federal, State, and local regulations. Any nonchemical-resistant protective suit which becomes drenched or heavily contaminated with an undiluted pesticide which has the signal word DANGER or WARNING on the label shall always be disposed of rather than being used.

(4) Respirator filter pads, cartridges, and canisters shall be replaced at least as often as recommended by the manufacturer.

(5) Before each day's use, all PPE shall be inspected for leaks, holes, tears, or worn places and any damaged equipment shall be repaired or discarded.

§ 170.18 Decontamination.

(a) *Requirement.* Water for washing off pesticides and pesticide residues shall be made available to each worker.

(b) *General conditions.* (1) The water shall be potable.

(2) The water shall be at a temperature that will not injure the eyes.

(3) If the water is stored in a tank, the water shall not also be used for mixing of pesticides, unless the tank is equipped with properly functioning valves or other mechanisms which prevent movement of pesticides into the tank.

(4) The water shall be reasonably accessible from each worker's place of work.

(5) The water shall not be located within a reentry-restricted area.

(6) The water shall be made available in adequate supply for routine washing of hands and face by workers as well as for emergency whole-body decontamination.

(7) Soap and single-use towels, in quantities sufficient to meet workers' needs, and a clean change of clothing, such as coveralls, shall be available at each decontamination water location.

(c) *Emergency eye flushing.* An eye flush dispenser containing at least one pint of water shall be made available to each worker who is required by the pesticide labeling to wear goggles or a face shield for the activity being performed. The dispenser shall be either carried by the worker, located on the vehicle which the worker is using, or otherwise immediately accessible.

§ 170.20 Cholinesterase monitoring.

(a) *Requirement.* Any worker who handles, for compensation on property not owned or rented by him or his employer, any pesticide product with the signal word "DANGER" or "WARNING" on the label containing any organophosphate active ingredient, on each of 3 consecutive days, or on any 6 days in a 21-day period, shall be monitored for cholinesterase inhibition.

(b) *Employer duties.* The employer of any commercial pesticide handler covered under paragraph (a) of this section shall:

(1) Engage the services of a licensed physician to supervise the cholinesterase monitoring of the handler. The agreement shall provide that the physician:

(i) Use the guidelines for cholinesterase monitoring provided by the Agency or other equivalent guidelines;

(ii) Advise the employer when changes to work practices may be warranted due to decreased cholinesterase levels;

(iii) Advise the employer when the handler should be removed from further exposure due to significantly decreased cholinesterase levels; and

(iv) Advise the employer when cholinesterase levels have regenerated to a level permitting return to exposure.

(2) Follow all recommendations of the physician concerning matters of cholinesterase monitoring, including frequency of testing and removal from exposure.

(3) Inform the handler that changes to work practices or removal from exposure due to excessive cholinesterase inhibition has been recommended by the physician, upon any such recommendation by the physician to the employer.

(c) *Recordkeeping.* The employer of any commercial pesticide handler, whether or not such handler is covered under paragraph (a) of this section, shall maintain a record for at least 2 years, to be made available upon request to State and Federal enforcement officials, of:

(1) All handling activities involving pesticide products with the signal word DANGER or WARNING on the label containing any organophosphate active ingredient, including date of handling and name of the pesticide product handled, for all handlers in his employ; and

(2) Any agreement made pursuant to paragraph (b)(1) of this section.

(d) *State requirements.* A State shall have the authority to modify the requirements of this section so long as cholinesterase monitoring of commercial pesticide handlers is required under conditions substantially equivalent to those described in this section.

(e) *Guidelines.* The Agency will develop and furnish on request to any individual, organization or State, guidelines for cholinesterase monitoring which will cover as a minimum: appropriate test methods, baseline testing, frequency of testing after exposure begins, and decreases in plasma and red blood cell levels for which work practices should be investigated and those for which medical removal of a worker from exposure should be made.

(Approved by the Office of Management and Budget under Control Number 2070–A325)

Subpart C—Common Standards for Workers on or in Farms, Forests, Nurseries and Greenhouses

§ 170.30 Applicability.

This subpart applies to, and contains standards to protect all workers from, pesticides used on or in farms, forests, nurseries and greenhouses.

§ 170.32 General pesticide safety information.

(a) *Requirement.* The general pesticide safety information specified in paragraph (f) of this section shall be displayed in a prominent location on or in each farm, forest, nursery or greenhouse during the growing season.

(b) *Access.* Each worker shall be informed of the location of the information and allowed reasonable access to it.

(c) *Language.* All information displayed shall be in English. If any worker cannot read English but can read another language, then a translation into that language shall be displayed, either of each item of information or else of the words "THIS INFORMATION IS ABOUT PESTICIDES AND YOUR HEALTH. IF YOU DO NOT UNDERSTAND THE INFORMATION, HAVE SOMEONE EXPLAIN IT TO YOU".

(d) *Legibility.* The information shall be displayed in such a manner that it remains legible for the duration of use.

(e) *Updating.* Each worker shall promptly be informed of any change to the information.

(f) *Content.* The information shall include:

(1) The name, address and telephone number of the nearest physician's office, clinic, or hospital that is equipped to provide emergency medical care in case of a pesticide-related poisoning or injury.

(2) A facsimile of the pesticide warning sign used for posting on the property and where the warning signs will be placed.

(3) The following statements concerning pesticide hazards, recommended safety practices, and

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duties of persons covered under this part:

(i) Some pesticides can cause death, injury, or disease.

(ii) Some pesticides that get on the skin can cause rashes or sores, and some pesticides that get in the eyes can cause eye injury or irritation.

(iii) Pesticides may enter the body through the mouth, skin, eyes, and lungs.

(iv) Pesticides may remain on surfaces, such as crops or soil, even though they cannot be seen or tasted.

(v) By taking steps to avoid or reduce exposure, you can help protect yourself from pesticide injury.

(vi) If you may have pesticides on your hands or face, you should wash before eating, drinking, using the toilet, or using gum or tobacco.

(vii) You should wash thoroughly and change into clean clothing at the end of each workday if you may have come into contact with pesticides.

(viii) Pesticides can accumulate on work clothing, so clothing worn on a workday involving contact with pesticides should be washed separately from other clothing before being worn again.

(ix) You should not pick, eat, or take home plants or food, without the supervisor's permission, because the food may be unsafe because of pesticides.

(x) You should not take home empty pesticide containers because they are not for home use and could injure you or your family.

(xi) Whether pesticides are applied in irrigation or watering systems on the property, and (if so) the kind of system used, that the worker should not drink, touch, or use water associated with the system, and that the worker should not enter these areas except at the direction of the supervisor.

(xii) Unless you are directed by a supervisor, you should not enter any area that has been treated with a pesticide if the pesticide sprays have not dried, the dusts have not settled, or the vapors have not dispersed, or if a reentry interval is in effect, or if a warning sign is posted.

(xiii) If you are accidentally sprayed directly or through drift, you should wash immediately in the nearest available water and then as soon as possible shower, shampoo and change into clean clothing.

(xiv) You should promptly seek medical attention and inform the supervisor, if you notice signs or symptoms of pesticide poisoning or pesticide injury.

(xv) The following information about pesticide applications will be provided to you upon request: location of the treated area, date or time of application, reentry interval, product name, registration number and active ingredients.

(xvi) Federal law establishes other safety rules for protecting workers from pesticide hazards, and requires workers, supervisors, employers, and owners to comply with those rules.

§ 170.34 Emergency duties.

(a) *Duty to provide transportation to emergency medical care.* When there is reason to believe that a worker has been poisoned or injured by a pesticide, or when an exposure to a pesticide has occurred that might be expected to lead to the poisoning or injury of any worker, prompt transportation to an appropriate medical facility shall be provided to the worker.

(b) *Duty to provide emergency information.* Upon request, the following information shall be provided if available to any worker or treating medical personnel who have grounds to suspect that a worker has been poisoned or injured by a pesticide:

(1) The product name, EPA registration number, and active ingredient(s) of the pesticide.

(2) Antidote or first aid information.

(3) Information about the circumstances of application or use of the pesticide on the property, or about the exposure of the worker to the pesticide.

§ 170.36 Precautions during application of pesticides.

(a) *Presence of workers.* No worker shall be allowed or directed to enter or remain in an area during application of any pesticide to that area, unless the worker is a handler involved in the application of the pesticide.

(b) *Contact with workers.* No pesticide shall be applied so as to contact any worker directly or through drift.

§ 170.38 Decontamination.

(a) *Requirement.* Water for washing off pesticides and pesticide residues shall be provided for any worker during any task which causes the worker to come into contact with any surface that has been treated with a pesticide during the agricultural production cycle in which the task occurs.

(b) *General conditions.* (1) The water shall be potable.

(2) The water shall be at a temperature that will not injure the eyes.

(3) If the water is stored in a tank, the water shall not also be used for mixing of pesticides, unless the tank is equipped with properly functioning valves or other mechanisms which prevent movement of pesticides into the tank.

(4) The water shall be reasonably accessible from each worker's place of work.

(5) The water shall not be located within a reentry-restricted area.

(6) The water shall be made available in adequate supply for routine washing of hands and face by workers.

(7) Soap and single-use towels shall be available at each water location, in quantities sufficient to meet workers' needs.

Subpart D—Special Standards for Workers on Farms and in Forests

§ 170.40 Applicability.

This subpart applies to, and contains standards to protect all workers from, pesticides used on farms and in forests.

§ 170.42 Information about pesticide applications.

(a) *Requirement and exception*—(1) *Requirement.* Information about the application of any pesticide to an area of a farm or forest shall be provided orally to each worker in accordance with paragraph (b) of this section and upon request in accordance with paragraph (c) of this section.

(2) *Exception.* Information need not be provided to a worker if, from the start of application until the end of the reentry interval, the worker will not enter, work in, remain in, or pass through, on foot or in an open vehicle, the pesticide-treated area or any neighboring areas, including growing areas and labor camps that are contiguous or separated only by a roadway from the treated area.

(b) *Information to be provided orally.* Whenever required by paragraph (a) of this section, information about the application of a pesticide shall be provided orally to each worker, in a language the worker can understand. The information shall be provided to each worker on the day of application at the beginning of the work day, and on each subsequent day that any reentry interval for that application is in effect. The information shall include:

(1) The specific location and description of the pesticide-treated area or area to be treated.

(2) The period of the work day during which workers may not enter without direction.

(c) *Information to be provided upon request.* Whenever required by paragraph (a) of this section, any of the following information about the application of a pesticide shall be provided to any worker if requested during the period beginning with the day

of application and ending with the expiration of the reentry interval:

(1) The specific location and description of the pesticide-treated area.

(2) The product name, EPA registration number and active ingredient(s) of the pesticide.

(3) The time or date the pesticide was applied (or the scheduled time or date of application).

(4) The reentry interval for the pesticide.

§ 170.44 Posting.

(a) *Requirement and exception*—(1) *Requirement.* If a pesticide having a reentry interval of greater than 48 hours is applied to an area of a farm or forest, the pesticide-treated area shall be posted with warning signs in accordance with paragraph (b) of this section.

(2) *Exception.* Posting is not required if, from the start of application until the end of the reentry interval, no worker (other than a pesticide handler applying the pesticide) will enter, work in, remain in, or pass through, on foot or in an open vehicle, the pesticide-treated area or any neighboring areas, including growing areas and labor camps that are contiguous or separated only by a roadway from the treated area.

(b) *Warning signs.* The posting of warning signs shall be in accordance with the following criteria:

(1) The warning signs shall contain the words "DANGER" and "PESTICIDES" at the top and "KEEP OUT" at the bottom. Near the center of the sign shall be a circle containing an upraised hand on the left and a stern face on the right. Letters for all the words shall be red and at least 2½ inches high and clearly legible. The background outside the circle shall be white. The hand and a large portion of the face shall be white. The length of the hand shall be at least twice the height of the letters and the length of the face shall be only slightly smaller than the hand. The remainder of the inside of the circle shall be red. A small black-and-white facsimile of a warning sign meeting these requirements follows.

BILLING CODE 6560-50-M

DANGER
PESTICIDES

KEEP OUT

BILLING CODE 6560-50-C

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(2) The signs shall be visible from all usual points of worker entry to the pesticide-treated area, including each access road, each border with any labor camp adjacent to the pesticide-treated area, and each footpath and other walking route that enters the pesticide-treated area. When there are no usual points of worker entry, signs shall be posted in the corners of the pesticide-treated area or in any other location affording maximum visibility.

(3) The signs shall:

(i) Be posted no sooner than 24 hours before the scheduled application of the pesticide.

(ii) Remain posted during application and throughout the reentry interval.

(iii) Be removed within 3 days after the expiration of the reentry interval and before worker reentry is permitted, other than reentry authorized by § 170.46.

(4) The signs shall remain legible for the duration of use.

(5) When several contiguous areas are to be treated with pesticides on a rotating or sequential basis, the entire area may be posted. Worker reentry, other than reentry authorized by § 170.46, is prohibited for the entire area while the signs are posted.

§ 170.46 Reentry.

(a) *General restriction and exceptions.* No worker shall be allowed or directed to enter or remain in a pesticide-treated area before the reentry interval specified on the pesticide labeling has expired unless either:

(1) The worker will have no contact with pesticide residues on treated surfaces or in soil, water or air; for example:

(i) Before sprays and dusts have settled and vapors have dispersed, the worker is operating in a closed vehicle with a positive pressure filtration system;

(ii) After sprays and dusts have settled and vapors have dispersed,

(A) The worker is performing activities that do not involve contact with soil subsurface, following a soil incorporated pesticide application,

(B) The worker is wearing chemical resistant shoes, shoe coverings or boots and is performing activities that do not involve hand contact with the soil, planting media or plant, following a soil-directed or basal-directed application,

(C) The worker is operating in an open vehicle such as a tractor, the crop is not tall and dense (would not brush against the worker) and the worker is not in a position where trees and other plants could drop pesticide residues on the worker; or

(2) The following requirements for early reentry workers are met:

(i) Personal protective equipment specified on the pesticide labeling is worn.

(ii) Duties related to personal protective equipment specified in § 170.16 are met.

(iii) Decontamination provisions specified in § 170.18 are available.

(iv) Training specified in § 170.12(b) is given.

(v) Any other requirement regarding early reentry specified on the pesticide labeling is met.

(b) *Prohibited activities.* No worker may enter a pesticide-treated area to perform any hand labor task until all sprays have dried, dusts have settled, or vapors have dispersed.

(c) *Multiple reentry intervals.* When two or more pesticides are applied at the same time, the reentry interval shall be the longest of the applicable intervals. When a pesticide has a reentry interval in addition to the "sprays have dried" interval, both shall be observed.

Subpart E—Special Standards for Workers in Nurseries

§ 170.50 Applicability.

This subpart applies to, and contains standards to protect all workers from, pesticides used in nurseries.

§ 170.52 Information about pesticide applications.

(a) *Requirement.* The following information about the application of any pesticide to an area of a nursery shall be provided to any worker if requested during the period beginning with the day of application and ending with the expiration of the reentry interval:

(1) The specific location and description of the reentry-restricted area.

(2) The product name, EPA registration number and active ingredient(s) of the pesticide.

(3) The time or date the pesticide was applied (or the scheduled time or date of application).

(4) The reentry interval for the pesticide.

(b) *Exception.* Information need not be provided to a worker if, from the start of application until the end of the reentry interval, the worker will not enter, work in, remain in, or pass through, on foot or in an open vehicle, the treated area or any neighboring areas, including growing areas and labor camps that are contiguous or separated only by a roadway from the treated area.

§ 170.54 Posting.

(a) *Requirement.* If a pesticide is applied to an area of a nursery, the reentry-restricted area shall be posted with warning signs in accordance with § 170.64(b). A sign must be of the appropriate size and be placed in a suitable location to meet the requirement of § 170.64(b)(2) for each type of nursery growing area, e.g., benches, pots on the ground and fields of plants growing in the ground.

(b) *Exception.* Posting is not required if, from the start of application until the end of the reentry interval, no worker (other than a pesticide handler applying the pesticide) will enter, work in, remain in, or pass through, on foot or in an open vehicle, the reentry-restricted area or any neighboring areas, including growing areas and labor camps that are contiguous or separated only by a roadway from the treated area.

§ 170.56 Reentry.

(a) *General restriction and exceptions.* No worker shall be allowed or directed to enter or remain in a reentry-restricted area before the reentry interval specified in paragraph (b) of this section has expired, unless:

(1) The worker will have no contact with pesticide residues on treated surfaces or in soil, water, or air; or

(2) The following requirements for early reentry workers are met:

(i) Personal protective equipment specified on the pesticide labeling for early reentry activities is worn.

(ii) Duties related to personal protective equipment specified in § 170.16 are met.

(iii) Decontamination provisions specified in § 170.18 are available.

(iv) Training specified in § 170.12(b) is given.

(v) Any other requirement regarding early reentry specified on the pesticide labeling is met.

(b) *Reentry-restricted areas and intervals.*—(1) *Soil-directed applications.* For any pesticide applied from a maximum height of 12 inches from the soil, either using a dry formulation or using coarse spray droplets and pressure less than 40 p.s.i., the reentry-restricted area shall be the pesticide-treated area until the reentry interval specified on the product labeling has expired. However, if the labeling of the pesticide requires the use of a respirator during application, the reentry-restricted area shall be as defined in paragraph (b)(2) of this section.

(2) *Downward-directed applications.* When any pesticide is applied from a height of greater than 12 inches from the soil, applied using fine spray droplets, or

applied using pressure greater than 40 p.s.i. but less than 150 p.s.i., and is directed downward, not including aerial applications, the reentry-restricted area shall be an area extending at least 25 feet beyond the perimeter on the downwind side of the pesticide-treated area and at least 10 feet beyond the perimeter of the pesticide-treated area in all other directions until sprays or dusts have settled. After sprays or dusts have settled and until the reentry interval specified on the pesticide labeling has expired, the reentry-restricted area shall be the pesticide-treated area.

(3) *Other applications.* For any pesticide applied aerially, directed upwards, or applied using pressure greater than 150 p.s.i., the reentry-restricted area shall be the pesticide-treated area and any moistened or dusted areas outside the pesticide-treated area, until spray or dusts have settled. After spray or dusts have settled and until the reentry interval specified on the pesticide labeling has expired, the reentry-restricted area shall be the pesticide-treated area.

(c) *Prohibited activities.* No worker may enter a reentry-restricted area to perform any hand labor task until all sprays have dried, dusts have settled, or vapors have dispersed.

(d) *Multiple reentry intervals.* When two or more pesticides are applied at the same time, the reentry interval shall be the longest of the applicable intervals. When a pesticide has a reentry interval in addition to the "sprays have dried" interval, both shall be observed.

Subpart F—Special Standards for Workers in Greenhouses

§ 170.60 Applicability.

This subpart applies to, and contains standards to protect all workers from, pesticides used in greenhouses.

§ 170.62 Information about pesticide applications.

(a) *Requirement.* The following information about the application of any pesticide to an area of a greenhouse shall be provided to any worker if requested during the period beginning with the day of application and ending with the expiration of the reentry interval:

(1) The specific location and description of the reentry-restricted area.

(2) The product name, EPA registration number and active ingredient(s) of the pesticide.

(3) The time or date the pesticide was applied (or the scheduled time or date of application).

(4) The reentry interval for the pesticide.

(b) *Exception.* Information need not be provided to a worker if, from the start of the application until the end of the reentry interval, the worker will not enter, work in, remain in, or pass through the greenhouse.

§ 170.64 Posting.

(a) *Requirement and exception*—(1) *Requirement.* If a pesticide is applied in a greenhouse, the reentry-restricted area shall be posted with warning signs in accordance with paragraph (b) of this section.

(2) *Exception.* Posting is not required if, from the start of application until the end of the reentry interval, no worker (other than a pesticide handler applying the pesticide) will enter, work in, remain in, or pass through the greenhouse.

(b) *Warning signs.* The posting of warning signs shall be in accordance with the following criteria:

(1) The warning signs shall contain the words "DANGER" and "PESTICIDES" at the top and "KEEP OUT" at the bottom. Near the center of the sign shall be a circle containing the upraised hand on the left and a stern face on the right. Letters for all the words shall be red and legible. The background outside the circle shall be white. The hand and a large portion of the face shall be white. The remainder of the inside of the circle shall be red. The length of the hand shall be at least twice the height of the letters and the length of the face shall be only slightly smaller than the hand. A black-and-white facsimile of a warning sign meeting these requirements is provided in § 170.44.

(2) The warning signs shall be visible from all points of access to the reentry-restricted area.

(3) The warning signs shall:

(i) Be posted immediately before the application of the pesticide.

(ii) Remain posted during application and throughout the reentry interval.

(iii) Be removed within 1 day after the expiration of the reentry interval and before worker reentry other than reentry authorized by § 170.66 is permitted.

(4) The warning signs shall remain legible for the duration of use.

(5) When several contiguous areas are to be treated with pesticides on a rotating or sequential basis, the entire areas may be posted. Worker reentry other than reentry authorized by § 170.66 is prohibited from the entire area while the signs are posted.

§ 170.66 Reentry.

(a) *General restrictions and exceptions.* No worker shall be allowed or directed to enter or remain in a reentry-restricted area before the reentry interval specified in paragraph (b) of this section has expired, unless:

(1) The worker will have no contact with pesticide residues on treated surfaces or in soil, water, or air; or

(2) The following requirements for early reentry workers are met:

(i) Personal protective equipment specified on the pesticide labeling for early reentry activities is worn.

(ii) Duties related to personal protective equipment specified in § 170.16 are met.

(iii) Decontamination provisions specified in § 170.18 are available.

(iv) Training specified in § 170.12(b) is given.

(v) Any other requirement regarding early reentry specified on the pesticide labeling is met.

(b) *Reentry-restricted areas and intervals—(1) Fumigant applications.* For any pesticide identified on the pesticide labeling as a fumigant, the reentry-restricted areas shall be the entire nonporous enclosed area within which the pesticide is applied. The reentry interval shall extend until all vapors have dispersed, as defined by one of the following criteria:

(i) Two hours of ventilation using fans or other mechanical ventilation systems.

(ii) Four hours of ventilation using vents, windows, or other passive ventilation systems.

(iii) Eleven hours with no ventilation, followed by 1 hour of mechanical ventilation.

(iv) Eleven hours with no ventilation, followed by 2 hours of passive ventilation.

(v) Twenty-four hours with no ventilation.

(vi) The air concentration of the fumigant is measured to be less than or equal to the permissible exposure level specified on the product labeling.

(2) *Smoke, mist, fog and aerosol applications.* For any pesticide applied in the form of a smoke, mist, fog, or aerosol, the reentry-restricted area shall be the entire nonporous enclosed areas within which the pesticide is applied until the reentry interval specified on the pesticide labeling has expired.

(3) *Soil-directed applications.* For any pesticide applied from a maximum height of 12 inches from the soil, either using a dry formulation or using coarse spray droplets and pressure less than 40 p.s.i., not including fumigant, smoke, mist, fog or aerosol applications, the reentry-restricted area shall be the

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pesticide-treated area until the reentry interval specified on the product labeling has expired. However, if the labeling of the pesticide requires the use of a respirator during application, the reentry-restricted areas shall be as defined in paragraph (b)(4) of this section.

(4) *Plant-directed applications.* For any pesticide applied from the height of more than 12 inches from the soil, applied using fine spray droplets or applied using pressure greater than 40 p.s.i., not including fumigant, smoke, mist, fog or aerosol applications, and ventilation occurs during application or before sprays and dusts have settled, the reentry-restricted area shall be the entire nonporous enclosed areas within which the pesticide is applied until sprays and dusts have settled. However, if no ventilation occurs during this period, the reentry-restricted area shall include an area within the greenhouse extending 25 feet beyond the perimeter of the pesticide-treated area. After sprays and dusts have settled, the reentry-restricted area shall be the pesticide-treated area until any reentry interval specified on the pesticide labeling has expired.

(c) *Prohibited activities.* No worker may enter a reentry-restricted area to perform any hand labor task until all sprays have dried, dusts have settled, or vapors have dispersed.

(d) *Multiple reentry intervals.* When two or more pesticides are applied at the same time, the reentry interval shall be the longest of the applicable intervals. When a pesticide has a reentry interval in addition to the "sprays have dried" interval, both shall be observed.

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AGRICULTURAL HAZARD COMMUNICATION ACT
(Right-to-Know Law)

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SUBTITLE G. WORKPLACE CHEMICALS [NEW]

CHAPTER 125. AGRICULTURAL HAZARD COMMUNICATION ACT

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Text of chapter added generally effective January 1, 1988

WESTLAW Electronic Research

See WESTLAW guide following the Explanation of this supplement.

§ 125.001. Declaration of Purpose

The legislature finds that the health and safety of persons living and working in agricultural areas in the state may be improved by providing access to information regarding certain hazardous chemicals to which they may be exposed either during their normal employment activities, during emergency situations, or as a result of proximity to the use of those chemicals. The legislature also finds that, because of the conditions of agricultural employment, there is a unique situation regarding certain agricultural laborers that makes it necessary to establish formal procedures to provide access to information regarding certain hazardous chemicals and to assure those laborers that there will be no retaliation by the employer for the exercise of rights under this chapter. This chapter is intended to assure that accessibility to information regarding chemicals covered by this chapter be provided to agricultural laborers who may be exposed to those chemicals in agricultural workplaces, to certain emergency service organizations responsible for dealing with chemical hazards during emergency situations when those chemicals are in close proximity to residential areas, and to the department to make the information available to the general public through specific procedures.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.002. Definitions

In this chapter:

(1) "Agricultural laborer" means a person who plants, cultivates, harvests, or handles an agricultural or horticultural commodity in its unmanufactured state as determined by rule of the department, and includes an agricultural laborer who handles a chemical covered by this chapter. Office workers, cooks, maintenance workers, security personnel, and nonresident management are not agricultural laborers, except for purposes of a gross annual payroll determination, unless their job performance routinely involves potential exposure to chemicals covered under this chapter. Farm and ranch laborers working solely with livestock and persons working solely in the retail sales component of a business are not agricultural laborers for purposes of this chapter.

(2) "Chemical name" means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard evaluation.

(3) "Common name" means any designation of identification such as code name, code number, trade name, brand name, or generic name used to identify a chemical other than by its chemical name.

(4) "Chemical manufacturer" means an employer in Standard Industrial Classification (SIC) Codes 20 through 39.

(5) "Designated representative" means the individual or organization to whom an agricultural laborer gives written authorization to exercise the laborer's rights under this chapter. A designated representative is not required to reveal the name of the

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agricultural laborer he represents if the department has reviewed the laborer's written authorization, certifies that the representative has that authorization, and determines that the agricultural laborer would be entitled to the information the designated representative is seeking to obtain. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written authorization from a laborer.

(6) "Distributor" means any business, other than a chemical manufacturer or importer, that supplies chemicals covered by this chapter to other distributors or to purchasers.

(7) "Expose" or "exposure" means that an agricultural laborer is subjected to a chemical covered by this chapter in the course of employment through any route of entry, including inhalation, ingestion, skin contact, or absorption, and includes potential, possible, or accidental exposure.

(8) "Fire chief" means the elected or paid administrative head of a fire department as defined in Chapter 125, Acts of the 45th Legislature, Regular Session, 1937 (Article 6243e, Vernon's Texas Civil Statutes).

(9) "Label" means any written, printed, or graphic material displayed on or affixed to containers of chemicals covered by this chapter.

(10) "Material safety data sheet" ("MSDS") means a document containing chemical hazard and safe handling information that is prepared in accordance with the requirements of the Occupational Safety and Health Administration (OSHA) standard for that document or, in the case of a chemical labeled under the federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136 et seq.) for which an MSDS is both unavailable and not required under the federal OSHA's hazard communication standard, a product label or other equivalent document with precautionary statements, such as hazards to humans and domestic animals, and environmental, physical, or chemical hazards, including warning statements.

(11) "Work area" means a room, defined space, or field where chemicals covered by this chapter are stored or used and where agricultural laborers may be present.

(12) "Workplace" means a geographical location containing one or more work areas.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.003. Application

(a) This chapter applies only to the following employers who annually use or store any one of the chemicals covered by this chapter in excess of 55 gallons or 500 pounds or an amount that the department determines by rule for certain highly toxic or dangerous chemicals covered by this chapter:

(1) employers who themselves or through labor agents hire agricultural laborers to perform seasonal or migrant work and whose gross annual payroll for those laborers is $15,000 or more; and

(2) employers who themselves or through labor agents hire agricultural laborers for purposes other than seasonal or migrant work and whose gross annual payroll for those laborers is $50,000 or more.

(b) This chapter applies only to the following chemicals:

(1) chemicals labeled under the federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136 et seq.); and

(2) fertilizers with chemicals that are listed or defined as hazardous chemicals in 29 CFR Section 1910.1200(c) or 1910.1200(d)(3), including those listed or defined in subsequent comparable regulations.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.004. Workplace Chemical List

(a) An employer covered by this chapter shall compile and maintain a workplace chemical list on a form prescribed by the department that contains the following information by crop for each chemical covered by this chapter that is actually used or stored annually in the workplace in excess of 55 gallons or 500 pounds or an amount that

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the department determines by rule for certain highly toxic or dangerous chemicals covered by this chapter:

(1) the product name used on the MSDS and container label and the Environmental Protection Agency registration number, if applicable;

(2) the date and crop on which the chemical was applied or used; and

(3) the work area in which the chemical is actually stored or used.

(b) The employer shall update the workplace chemical list as necessary but not less frequently than annually.

(c) The workplace chemical list may be prepared for the workplace as a whole or for each work area and must be readily available to agricultural laborers and their designated representatives. New or newly assigned agricultural laborers shall be made aware of the workplace chemical list before working with chemicals covered by this chapter or in a work area containing those chemicals.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.005. Workplace Chemical List Form, Maintenance, and Access

(a) The department shall prescribe forms for workplace chemical lists required by this chapter with places to indicate the crop, the product name of the chemical that is applied to the crop or that is stored, and the location and date of its application, use, or storage, as appropriate.

(b) An employer covered by this chapter shall maintain one form for each crop, work area, or workplace as a whole, as appropriate, and shall add information to the form as different chemicals are applied, used, or stored.

(c) The employer shall attach relevant information to the form, including MSDSs.

(d) The employer shall keep the forms and attachments accessible and available for copying and shall store them in a location suitable to preserve their physical integrity.

(e) The employer shall keep the forms and attachments under this chapter for 30 years. However, the department shall provide by rule that an employer may file with the department annually the forms and attachments, including an estimate of the total amount of each chemical listed on the form that was used. The department shall categorize and cross-reference the data on the forms in a manner to preserve the data for future medical use. An employer who files the forms and attachments with the department under rules adopted under this section is not required to preserve the forms.

(f) After January 1, 1989, if the department determines after a hearing that an employer has repeatedly failed to maintain the forms and attachments as required, the department may require the employer to file the documents with the department. In addition, the person may be subject to any applicable penalties provided by this chapter.

(g) If agricultural activities for which forms and attachments are maintained cease at a workplace, the forms and attachments shall be filed with the department, and the department shall retain the information for 30 years. If an employer covered by this chapter is succeeded or replaced in that function by another person, the person who succeeds or replaces the employer shall retain the forms as provided by Subsection (e) of this section but is not liable for violations committed by the former employer under this chapter or rules adopted under this chapter, including violations relating to the retention and preservation of forms and attachments.

(h) Except as otherwise provided by this section, the employer shall show the forms and attachments, on request, to an employee, designated representative, treating medical personnel, or a member of the community. The designated representative or treating medical personnel are not required to identify the employee represented or treated. If the employer has filed the forms and attachments with the department, the employer shall inform the requestor of that fact.

(i) If a designated representative or member of the community desires a copy of a form and attachments and the employer refuses to provide a copy, that person shall notify the department of the request and the employer's refusal. Within two working days, the department shall request that the employer provide the department with all pertinent copies. The employer shall provide copies of the form and attachments to the department

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within 24 hours after the department's request if a designated representative desires the copies, and within 14 days after the department's request if a member of the community desires the copies.

(j) The employer may not refuse to provide the forms and attachments to an employee or treating medical personnel.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.006. Material Safety Data Sheets

(a) Chemical manufacturers and distributors shall provide appropriate MSDSs to purchasers in this state of chemicals covered by this chapter.

(b) Employers covered by this chapter shall maintain the most current MSDS received from manufacturers or distributors for each purchased chemical covered by this chapter. If an MSDS has not been provided by the manufacturer or distributor for chemicals on the workplace chemical list at the time the chemicals are received at the workplace, the employer shall request one in writing from the manufacturer or distributor in a timely manner. This chapter does not require an employer who is not a chemical manufacturer to create an MSDS.

(c) The department may require any person who has or obtains a registration for a pesticide under Sections 76.041-76.048 of this code to provide with the registration a copy of the most current and complete MSDS for that pesticide.

(d) The department by rule may require chemical manufacturers to submit MSDSs for chemicals covered by this chapter, excluding chemicals covered by Subsection (c) of this section.

(e) All MSDSs in the files of the department are public records.

Added by Acts 1987, 70th Leg., ch. 903, § 1.

1987 Legislation

Section 2 of the 1987 Act provides: "This Act takes effect January 1, 1988, except that Section 125.006(c), Agriculture Code, as added by this Act, takes effect September 1, 1987."

§ 125.007. Labels

(a) Existing labels on incoming containers of chemicals covered by this chapter may not be removed or defaced.

(b) Agricultural laborers may not be required to work with a chemical covered by this chapter from an unlabeled container except for a portable container intended for the immediate use of the laborer who performs the transfer.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.008. Emergency Information

(a) Employers covered by this chapter and other entities who normally store products labeled under the federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136 et seq.) in an amount in excess of 55 gallons or 500 pounds or an amount the department determines by rule for certain highly toxic or dangerous chemicals covered by this chapter within one-quarter mile of a residential area composed of three or more private dwellings shall provide to the fire chief of the fire department having jurisdiction over the storage place, in writing, the names and telephone numbers of knowledgeable representatives of the employer or other entity storing the product who can be contacted for further information or contacted in case of an emergency.

(b) Each employer, on request, shall provide a copy of the workplace chemical list to the fire chief having jurisdiction over the storage place. The employer shall notify the fire chief of any significant changes that occur in the workplace chemical list.

(c) The fire chief having jurisdiction over the storage place or his representative, on request, shall be permitted to conduct on-site inspections of the chemicals on the workplace chemical list for the sole purpose of preparing fire department activities in case of an emergency.

(d) Employers shall provide to the fire chief having jurisdiction over the storage place, on request, a copy of the MSDS for any chemical on the workplace chemical list.

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(e) On request, the fire chief having jurisdiction over the storage place shall make the workplace chemical list and MSDSs available to members of the fire department having jurisdiction over the workplace and to other personnel outside the fire department who are responsible for preplanning emergency activities, but may not otherwise distribute the information without approval of the employer.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.009. Training Program Provided by Department

(a) The department in conjunction with the Texas Agricultural Extension Service shall develop an on-going training program for agricultural laborers. The program must provide information the department considers appropriate, and must include:

(1) information on interpreting labels and MSDSs and the relationship between those two methods of hazard communication;

(2) information on the proper storage, acute and chronic effects, and safe handling of chemicals covered by this chapter;

(3) information on protective clothing and equipment and first aid treatment to be used with respect to the chemicals covered by this chapter; and

(4) general safety instructions on the handling, cleanup procedures, and disposal of chemicals covered by this chapter.

(b) The department shall provide the training program in counties with a hired farm labor work force of 2,000 or more, according to the most recent United States Census of Agriculture. The department by rule may determine to provide the training program in additional counties with a significant farm labor work force or based on other relevant factors. In all other counties, the county office of the Texas Agricultural Extension Service shall provide the training program.

(c) The department or the county office of the Texas Agricultural Extension Service, as appropriate, shall notify agricultural laborers on a regular basis of the training program by public service announcements given by the media and shall contact in writing charitable, public, religious, and health care provider organizations to announce the training program to agricultural laborers in the county served by the organization.

(d) In addition to the Texas Agricultural Extension Service, the department may develop the training program in conjunction with the Texas Department of Health, other appropriate state agencies, clinics, hospitals, and other health care providers in counties in which the training program will be conducted, and organizations representing employers, organizations representing employees, and organizations representing manufacturers of chemicals covered by this chapter.

(e) The department shall prepare and make available to employers appropriate training materials for employers covered by this chapter and their managers and labor contractors.

(f) To help cover production costs, the department may charge not more than $10 plus the cost of a blank videotape from a person desiring to purchase the videotaped training program.

(g) The department or the county office of the Texas Agricultural Extension Service, as appropriate, shall provide to each agricultural laborer who completes the training program a card evidencing participation in the program. An employer may not refuse to hire an agricultural laborer solely because the laborer does not have a card issued under this subsection. An employer who refuses to hire an agricultural laborer for that reason is not entitled to the 14 days' written notice provided by Section 125.016(d) of this code.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.010. Crop Sheet Developed by Department

(a) The department shall develop crop sheets that contain the following information:

(1) the kinds of chemicals typically used on a particular crop;

(2) the typical time a chemical is applied to a particular crop;

(3) general safety information, including information on general hygiene, clothing, contact with chemicals, medical symptoms, pregnancy, and other relevant safety data;

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(4) a notice of the training programs and the counties in which the programs will be conducted;

(5) the availability of MSDSs for chemicals used on a particular crop;

(6) the means of locating emergency medical information;

(7) agricultural laborers' rights under this chapter;

(8) the name and telephone number of the person to contact for information under this chapter;

(9) the appropriate telephone number for emergency information; and

(10) any other safety or health-related information the department considers relevant.

(b) The information on the crop sheet must be printed in English and Spanish, except that the information required by Subsections (a)(1) and (a)(2) of this section is required to be printed only in English. The department may provide crop sheets printed in other languages commonly used by agricultural laborers who work with a particular crop.

(c) The department shall develop the crop sheets in conjunction with the Texas Department of Health, the Texas Agricultural Extension Service, other appropriate state agencies, and clinics, hospitals, and other health care providers in counties in which training programs are provided by the department under Section 125.009 of this code.

(d) Annually, the department shall:

(1) provide appropriate crop sheets to clinics, hospitals, and other health care providers that serve agricultural laborers and that are located in counties in which the training program is provided; and

(2) provide to an employer covered by this chapter one crop sheet for each crop grown by that employer.

(e) The director of the Texas Feed and Fertilizer Control Service under Section 63.003 of this code shall provide to the department the information that is needed by the department under Subsection (a) of this section for the fertilizers that are covered by this chapter.

(f) For purposes of developing crop sheets under this chapter and complying with other provisions of this chapter, nursery stock, stored grain, and other logical groupings may be considered a single crop as determined by rules adopted by the department.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.011. Crop Sheet Provided by Employer

(a) An employer covered by this chapter shall provide crop sheets to each agricultural laborer pertaining to the crops that laborer will be working with if:

(1) the laborer does not have a card issued under Section 125.009(g) of this code; or

(2) the laborer requests the crop sheets.

(b) An employer who is required under Subsection (a) of this section to provide crop sheets to an agricultural laborer shall ensure that the information on a crop sheet required by Sections 125.010(a)(3), (a)(4), and (a)(10) of this code that pertains to the crops with which the laborer will be working is read to the laborer at least once each work season. When the crop sheet is read, the employer or the employer's agent shall inform the laborer of the date on which chemicals covered by this chapter were last applied or are scheduled to be applied to the field or to other areas in which the laborer will be working and shall inform the laborer of the time on which the reentry period, if any, expired for chemicals covered by this chapter that have been applied.

(c) If an employer is required under Subsection (b) of this section to read a crop sheet to an agricultural laborer, the employer or a person designated by the employer shall read the appropriate crop sheets on the first day of each work season or on the day the laborer begins employment with that employer, whichever is later.

(d) In addition to the crop sheet, the department shall require an employer to offer to the agricultural laborer, on the day on which the laborer is given his first pay for that work season, basic safety and health-related information approved by the department. That information shall be available to the employers free of charge.

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(e) An employer who does not provide or read the crop sheets as required by this section is not entitled to the 14 days' written notice provided by Section 125.016(d) of this code.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.012. Protective Clothing

An employer covered by this chapter shall provide any protective clothing or device that is recommended by the MSDS, crop sheet, or department rule and that is in addition to the standard long-sleeved shirt, long pants, boots or shoes, and socks normally provided by the agricultural laborer.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.013. Rights of Agricultural Laborers

(a) Agricultural laborers employed by employers covered by this chapter who may be exposed to chemicals covered by this chapter shall be informed of the exposure and shall have access to the workplace chemical list and MSDSs for those chemicals. Laborers, on request, shall be provided a copy of a specific MSDS. In addition, laborers shall receive training on the hazards of the chemicals and on measures they can take to protect themselves from those hazards and shall be provided with appropriate personal protective equipment as required by this chapter. These rights are guaranteed on January 1, 1988.

(b) An employer covered by this chapter may not discharge, cause to be discharged, otherwise discipline, or in any manner discriminate against an agricultural laborer because the laborer has made an inquiry, filed a complaint, assisted an inspector of the department who may make or is making an inspection under Section 125.016 of this code, instituted or caused to be instituted any proceeding under or related to this chapter, testified or is about to testify in such a proceeding, or exercised any rights afforded under this chapter on behalf of the laborer or on behalf of others. Pay, position, seniority, or other benefits may not be lost as the result of the exercise of any right provided by this chapter.

(c) Any waiver by an agricultural laborer of the benefits or requirements of this chapter is against public policy and is void. Any employer's request or requirement that a laborer waive any rights under this chapter as a condition of employment is a violation of this chapter.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.014. Department Rules; Outreach Program

(a) The department may adopt rules and administrative procedures reasonably necessary to carry out the purposes of this chapter.

(b) The department shall develop and provide to each employer covered by this chapter a suitable form of notice providing agricultural laborers with information regarding their rights under this chapter.

(c) As part of an outreach program, the department shall develop and distribute a supply of informational leaflets on employers' duties, agricultural laborers' rights, the public's ability to obtain information under this chapter, the outreach program, and the effects of chemicals covered by this chapter.

(d) The department may contract with a public institution of higher education or other public or private organizations to develop and implement the outreach program.

(e) The department shall publicize the availability of information to answer inquiries from agricultural laborers, employers, or the public in this state concerning the effects of chemicals covered by this chapter.

(f) In cooperation with the department, an employer covered by this chapter may provide an outreach program in the community.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.015. Liability Under Other Laws

(a) The provision of information to an agricultural laborer does not in any way affect the liability of an employer with regard to the health and safety of a laborer or other

person exposed to chemicals, nor does it affect the employer's responsibility to take any action to prevent the occurrence of occupational disease as required under any other provision of law.

(b) The provision of information to an agricultural laborer does not affect any other duty or responsibility of a manufacturer, producer, or formulator to warn ultimate users of a chemical under any other provision of law.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

§ 125.016. Complaints, Investigations, and Penalties

(a) Complaints received in writing from agricultural laborers or their designated representatives relating to alleged violations of this chapter by employers covered by this chapter shall be investigated in a timely manner by the department as provided by this section.

(b) Officers or representatives of the department, on presentation of appropriate credentials, have the right of entry into any workplace at reasonable times to inspect and investigate complaints for purposes of determining compliance with this chapter.

(c) The department shall complete an investigation of a complaint not later than 90 days after the date on which the complaint is filed. The department shall conduct a hearing and issue an enforcement order, if appropriate, not later than 90 days after the date on which the investigation is completed. If it is necessary to commence an action relating to an alleged violation, the action must be commenced not later than 60 days after the date on which the investigation is completed.

(d) After providing at least 14 days' written notice and an opportunity for a public hearing, the department may issue an enforcement order requiring any employer or chemical manufacturer covered by this chapter to comply with this chapter or rules adopted under this chapter. In addition, if the employer or chemical manufacturer fails to comply with this chapter or rules adopted under this chapter within 14 days after receiving the written notice under this subsection, or fails at any time to comply with an enforcement order issued under this chapter, the department may require the employer or chemical manufacturer to pay an administrative penalty of not more than $500 for each act that is a violation of this chapter or a rule adopted or enforcement order issued under this chapter. A public hearing held under this subsection is a contested case under the Administrative Procedure and Texas Register Act (Article 6252-13a, Vernon's Texas Civil Statutes), and may be appealed under that Act. In the case of a medical emergency, the department may issue an enforcement order immediately and shall provide the opportunity for a hearing on the order within 10 days after the date on which the order is issued.

(e) In the case of a medical emergency, the department may sue in the name of the State of Texas to enjoin any violation of this chapter or a rule adopted or enforcement order issued by the department under this chapter.

(f) If required under this chapter, employers who knowingly disclose false information or negligently fail to disclose a hazard are subject to a civil penalty of not more than $5,000 per violation. This section does not affect any other right of an agricultural laborer, or any other person to receive compensation for damages under other law.

(g) If required under this chapter, employers who proximately cause an injury to an individual by knowingly disclosing false hazard information or knowingly failing to disclose hazard information are subject to a criminal fine of not more than $25,000. This section does not affect any other right of an agricultural laborer or any other person to receive compensation for damages under other law.

(h) The department may request the attorney general to represent the department in any legal proceeding authorized under this chapter. An action for penalties or injunctive relief shall be brought in the county in which the alleged violation occurred or is occurring.

(i) Each violation of this chapter or a rule adopted under this chapter constitutes a separate offense.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

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§ 125.017. Compliance with Hazard Communication Act

(a) If an employer is required to comply with the Hazard Communication Act (Article 5182b, Vernon's Texas Civil Statutes) and with this chapter, the employer is required to comply with only the Hazard Communication Act. However, if an agricultural laborer is not covered under the Hazard Communication Act, the employer shall comply with this chapter for those laborers not covered by the Hazard Communication Act.

(b) If an employer is covered by both the Hazard Communication Act and this chapter, the employer is required to furnish a workplace chemical list under only one of those laws.

Added by Acts 1987, 70th Leg., ch. 903, § 1, eff. Jan. 1, 1988.

INDEX TO AGRICULTURE CODE

See volume containing end of Agriculture Code

TEXAS AGRICULTURAL HAZARD COMMUNICATION ACT
WORKPLACE CHEMICAL LIST
P.O. BOX 12847
AUSTIN, TEXAS 78711

1- Year	2- Federal Employer I D Number (Required if form sent to TDA)	3- Agricultural Employer (Firm or Individual Name)	
4- Mailing Address	5-City	6- ZIP Code	7-County
8- Authorized Business Representative		9- Phone Number ( )	10- County of Workplace
11- Storage Area Location			

12-Date Applied	13- Location of Work Area Treated	14- Name of Crop	15- Name of Product Applied	16- EPA Reg. No.	17- Estimated Amount of Product Applied Per Acre	18-Acres Treated	19 MSDS Y/N *
					lb oz pt qt gl		
					lb oz pt qt gl		
					lb oz pt qt gl		
					lb oz pt qt gl		
					lb oz pt qt gl		
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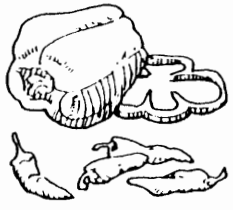
TDA 0544 * [illegible] an MSDS (Material Safety Data Sheet) on file for every pesticide used. Be sure to request the MSDS from the dealer or manufacturer

EXHIBIT 4

LEA Y GUARDE LOS INFORMES DE COSECHA / READ AND SAVE THIS CROP SHEET



CHILES
PEPPERS

✓ ESTOS SON LOS PESTICIDAS USADOS CON MAS FRECUENCIA EN ESTA COSECHA. UNO O MAS DE LOS SIGUIENTES SINTOMAS PUEDEN INDICAR QUE HA SIDO ENVENENADO CON UN PESTICIDA. / These are the most commonly used pesticides for this crop. One or several of the following symptoms may indicate a pesticide poisoning:

✓ **IRRITACION DE OJOS, PIEL O GARGANTA**
irritation of eyes, skin or throat

✓ **PICAZON, ERUPCION DE LA PIEL**
itching, rash

✓ **DOLORES DE CABEZA**
headaches

✓ **VISTA BORROSA**
blurry vision

✓ **MAREOS**
dizziness

✓ **SUDOR DEMASIADO**
excessive sweating

✓ **VOMITO**
vomiting

✓ **DOLORES DEL PECHO**
chest pains

QUIMICA / CHEMICAL	MESES DE USO / MONTHS APPLIED (E/J F M A M J J A S O N D)	NO ENTRE A UN CAMPO ROCIADO / DO NOT ENTER SPRAYED FIELDS	CLASE / CLASS	EFECTOS A LA SALUD Y PRECAUCIONES / HEALTH EFFECTS AND PRECAUTIONS
✓ Methomyl Lannate, Nudrin*		✓ POR 24 HORAS / For 24 hours	Carbamate	✓ **EFECTOS A LARGO PLAZO** / Long Term Effects: **SE SOSPECHA QUE ALGUNOS PESTICIDAS CAUSAN DEFECTOS NATALES, ABORTO ESPONTANEO, ESTERILIDAD EN EL HOMBRE Y LA MUJER, IRRITACIONES A LA PIEL, DAÑOS AL HIGADO U OTROS ORGANOS. TAMBIEN SE SOSPECHA QUE ALGUNOS PESTICIDAS CAUSAN, A LARGO PLAZO, TUMORES O CANCER.** / Some pesticides are suspected of causing birth defects, reproductive effects, skin problems, and injury to liver or other organs. Some pesticides are also suspected of causing tumors or cancer over a long period of time.
✓ Permethrin Ambush, Pounce*		✓ POR 24 HORAS / For 24 hours	Synthetic Pyrethroid	
✓ Copper Hydroxide Kocide*		✓ POR 24 HORAS / For 24 hours	Inorganic Salt	
✓ Cyromazine Trigard*		✓ POR 7 DIAS / For 7 days	Triazine	
✓ Azinphosmethyl Guthion*		✓ POR 48 HORAS / For 48 hours	Organophosphate	✓ **PRECAUCIONES EN GENERAL** / General Precautions: **LOS PESTICIDAS SE DEBEN DE USAR Y GUARDAR DE ACUERDO CON LAS INSTRUCCIONES QUE APARECEN EN LA ETIQUETA. CUIDE SU SALUD Y LA DE SU FAMILIA SIGUIENDO LAS RECOMENDACIONES QUE SE DAN EN ESTE INFORME.** / Pesticides must be handled, stored, and used according to label directions. Follow the safety precautions on this sheet to protect yourself and your children.
Methamidophos Monitor*		✓ POR 24 HORAS / For 24 hours	Organophosphate	
✓ Carbaryl Sevin*		✓ POR 24 HORAS / For 24 hours	Carbamate	
✓ Copper Sulfate Tri Basic*		✓ POR 24 HORAS / For 24 hours	Inorganic Salt	✓ = **DEMASIADO PELIGROSO. MENOS DE UNA CUCHARITA LO PUEDE MATAR.** / EXTREMELY DANGEROUS. Less than one teaspoon may kill you.

OTROS PESTICIDAS USADOS SON / Other pesticides used are: Dimethoate, Maneb, ESFenvalerate, Acephate, Bacillus thuringiensis, Methyl Parathion, Fenvalerate, Diazinon, Mevinphos, Pyrethrin, Captan, Paraquat, Parathion, Endosulfan, Oxydemeton-methyl, Bensulide, Trifluralin, Napropamide, Cytokinin.

* PRODUCTOS DE USO GENERAL
* Commonly used product

LA LEY REQUIERE QUE EL PATRON LEA LA INFORMACION MARCADA CON ✓ A SUS TRABAJADORES. LEA SOLAMENTE LAS QUIMICAS Y PERIODO DE ENTRADA PARA ESAS QUIMICAS QUE USTED USA. /
The law requires that employers read the information marked with ✓ to workers that they work with. You are only required to read the chemicals and reentry intervals for the pesticides you use.

28PX

INFORME DE COSECHA PAGINA 2
CROP SHEET PAGE 2
1988

NOMBRE DEL PATRON / Name of Employer
DIRECCION / Address
TELEFONO / Phone Number

Distributed by:
TEXAS DEPARTMENT OF AGRICULTURE
Jim Hightower, Commissioner
P.O. Box 12847, Austin, Texas 78711
1-800-832-7347

AVISOS DE SALUBRIDAD / SAFETY TIPS: ✓ **NO USE BOTES DE PESTICIDAS EN EL HOGAR / DO NOT USE PESTICIDE CONTAINERS FOR HOME USE** **AVISOS DE SALUBRIDAD / SAFETY TIPS:**

✓

PARA QUE LOS PESTICIDAS NO LE PENETREN AL CUERPO SE RECOMIENDA QUE SE LAVE LAS MANOS BIEN ANTES DE COMER, BEBER, FUMAR, MASTICAR CHICLE O TABACO, O IR AL BAÑO.

Washing before eating, drinking, smoking using gum or tobacco, or going to the bathroom is a good way to keep pesticides from getting into your mouth or going through your skin.

✓

SI USTED ESTA EMBARAZADA, CONSULTE CON SU MEDICO SOBRE LOS PELIGROS DE ESTAR EXPUESTA A PESTICIDAS DURANTE SU EMBARAZO. MANTENGA A LOS NIÑOS FUERA DE LAS LABORES Y LEJOS DE LOS PESTICIDAS.

If you are pregnant, ask your doctor about the risk from pesticide poisoning. Keep children out of the fields and away from pesticides.

✓

ES POSIBLE QUE ENSUCIE LA ROPA DE TRABAJO CON LOS PESTICIDAS. LAVE LA ROPA ANTES DE PONERSELA OTRA VEZ Y CUANDO LA LAVE SEPARALA DE LA OTRA ROPA.

Pesticides can remain on your work clothes. Wash your work clothes before wearing them again and wash in a different load from other laundry.

✓

LA LEY PROHIBE QUE USTED SE EXPONGA AL ROCIO DEL PESTICIDA DIRECTAMENTE, O INDIRECTAMENTE A CAUSA DEL VIENTO. SI LE CAE PESTICIDA, LAVESE EN SEGUIDA CON CUALQUIER AGUA LIMPIA CERCANA. TAN PRONTO SEA POSIBLE, BAÑESE, LAVESE EL PELO Y PONGASE ROPA LIMPIA.

It is prohibited by law for you to be sprayed, directly or through drift. If you are sprayed, wash immediately in the nearest clean water. Shower, shampoo, and change into clean clothes as soon as possible.

✓

PROTEJASE DE LOS PESTICIDAS USANDO CAMISA DE MANGA LARGA, PANTALONES LARGOS, ZAPATOS, CALCETINES, Y UN SOMBRERO O UNA PAÑUELETA. SE RECOMIENDAN GUANTES.

Protect yourself from getting pesticides on your skin by wearing a long-sleeved shirt, long-legged pants, shoes and socks, and a hat or scarf. Gloves are recommended.

✓ SI USTED CREE QUE TIENE ALGUN SINTOMA DE ENVENENAMIENTO CON PESTICIDAS:

- Inmediatamente lávese con jabón y agua,
- Vaya al doctor, hospital o clínica de migrantes más cercano,
- Vaya con un familiar o un amigo (NO MANEJE USTED MISMO),
- Llevese este Informe de Cosecha (Crop Sheet) para que lo vea el doctor,
- Digale al doctor que usted cree que ha sido expuesto a pesticidas. Su doctor puede llamarle a su patron para pedirle más información acerca de los pesticidas que se usaron,
- Para conseguir Información de emergencia acerca de los pesticidas su doctor debe de llamar a un Centro de Control de Venenos (Poison Control Center) al 1-800-441-0040 o al 409-765-1420 o al 1-800-392-8548 o la Cadena Nacional de Telecomunicaciones sobre Pesticidas (The National Pesticides Telecommunications Network) al 1-800-858-7378

✓ IF YOU THINK YOU HAVE A PESTICIDE POISONING SYMPTOM:

- Immediately wash with soap and water,
- Go to the nearest doctor, hospital, or migrant health clinic,
- Have a family member or friend go with you (DO NOT DRIVE YOURSELF),
- Take this Crop Sheet with you for the doctor,
- Tell the doctor you think you were exposed to pesticides. Your doctor can call your employer for more information about what pesticides were used.
- Have your doctor call to get emergency information about the pesticides from a Poison Control Center at 1-800-441-0040 or 409-765-1420 or 1-800-392-8548 or The National Pesticide Telecommunications Network at 1-800-858-7378

COMO CAMPESINO USTED TIENE EL DERECHO DE:

- Pedir los nombres de las químicas que se usaron en la labor,
- Recibir de cada patrón los Informes de Cosecha para cada cosecha en la que usted trabaja,
- pedir al patrón su lista de productos químicas e informes de estos productos,
- Presentar su queja al Departamento de Agricultura de Texas si sus derechos han sido violados. LLAME GRATIS AL 1-800-832-7347, y
- Asistir a los programas de entrenamiento presentados por el Departamento de Agricultura de Texas o por el Servicio de Extension Agrícola de Texas, (según donde usted trabaja).Comuniquese con su oficina local o llame 1-800-832-7347.

AS A FARMWORKER, YOU HAVE THE RIGHT TO:

- Request the names of the chemicals that have been applied to a field,
- Receive Crop Sheets each season from each employer,
- Receive the Workplace Chemical List and Material Safety Data Sheets from your employer(s) when you ask,
- File a complaint with the Texas Department of Agriculture if your rights are violated. CALL 1-800-832-7347, and
- Attend training programs provided by the Texas Department of Agriculture or Texas Agricultural Extension Service, (depending on where you work). Contact your local office or call 1-800-832-7347.

2904

IN THE LEGISLATURE
of the
STATE OF WASHINGTON

CERTIFICATION OF ENROLLED ENACTMENT

HOUSE BILL NO. 2222

Passed the House April 14, 1989 as amended
Yeas 85 Nays 12

Passed the Senate April 23, 1989 as amended
Yeas 35 Nays 10

April 23, 1989: House concurred in Senate amendments and passed the bill as amended by the Senate.

Yeas: 86 Nays: 6

CERTIFICATE

I, Alan Thompson, Chief Clerk of the House of Representatives of the State of Washington, do hereby certify that the attached is enrolled HOUSE BILL NO. 2222 as passed by the House of Representatives and the Senate on the dates hereon set forth.

Alan Thompson
ALAN THOMPSON, Chief Clerk

EXHIBIT
5
ALL STATE LEGAL SUPPLY CO.

AS AMENDED BY THE SENATE

State of Washington 51st Legislature 1989 Regular Session

by Representatives Vekich, Prentice, Patrick and Leonard

Read first time 4/11/89 and referred to Committee on Commerce & Labor

AN ACT Relating to state regulatory programs; amending RCW 15.58.030, 15.58.040, 15.58.050, 15.58.060, 15.58.065, 15.58.070, 15.58.080, 15.58.110, 15.58.120, 15.58.130, 15.58.150, 15.58.160, 15.58.170, 15.58.180, 15.58.200, 15.58.210, 15.58.220, 15.58.230, 15.58.240, 15.58.250, 15.58.260, 15.58.280, 15.58.290, 15.58.330, 15.58.335, 15.58.340, 15.58.910, 17.21.020, 17.21.030, 17.21.040, 17.21.050, 17.21.070, 17.21.080, 17.21.100, 17.21.110, 17.21.122, 17.21.126, 17.21.129, 17.21.130, 17.21.140, 17.21.150, 17.21.160, 17.21.180, 17.21.190, 17.21.200, 17.21.220, 17.21.230, 17.21.240, 17.21.250, 17.21.260, 17.21.270, 17.21.280, 17.21.290, 17.21.315, 17.21.320, 17.21.910, 70.104.030, 50.04.150, 50.29.025, 50.20.100, and 50.29.062; adding new sections to chapter 15.58 RCW; adding new sections to chapter 17.21 RCW; adding new sections to chapter 49.70 RCW; adding new sections to chapter 70.104 RCW; adding a new chapter to Title 49 RCW; creating new sections; repealing RCW 15.58.190, 15.58.930, 17.21.090, 17.21.120, 17.21.124, and 17.21.205; prescribing penalties; and providing effective dates.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

Sec. 1. Section 3, chapter 190, Laws of 1971 ex. sess. as last amended by section 26, chapter 182, Laws of 1982 and RCW 15.58.030 are each amended to read as follows:

As used in this chapter the words and phrases defined in this section shall have the meanings indicated unless the context clearly requires otherwise.

(1) ((~~"Pesticide" means, but is not limited to, (a) Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, nematode, mollusk, fungus, weed and any other form of plant or animal life or virus (except virus on or in living man or other animal) which is normally~~

considered to be a pest or which the director may declare to be a pest; (b) any substance or mixture of substances intended to be used as a plant regulator, defoliant or desiccant; (c) any substance or mixture of substances intended to be used as a spray adjuvant; and (d) any other substances intended for such use as may be named by the director by regulation.

(2) "Device" means any instrument or contrivance intended to trap, destroy, control, repel, or mitigate pests including devices used in conjunction with pesticides such as lindane vaporizers.

(3) "Insecticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any insect, other arthropod, or mollusk pest.

(4) "Fungicide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any fungi.

(5) "Rodenticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate rodents or any other vertebrate animal which the director may declare by regulation to be a pest.

(6) "Herbicide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any weed, including algae and other aquatic weeds.

(7) "Nematocide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate nematodes.

(8) "Plant regulator" means any substance or mixture of substances intended through physiological action, to accelerate or retard the rate of growth or maturation, or to otherwise alter the behavior of ornamental or crop plants but shall not include substances insofar as they are intended to be used as plant nutrients, trace elements, nutritional chemicals, plant inoculants, or soil amendments.

(9) "Defoliant" means any substance or mixture of substances intended to cause the leaves or foliage to drop from a plant with or without causing abscission.

(10) "Desiccant" means any substance or mixture of substances intended to artificially accelerate the drying of plant tissues.

(11) "Spray adjuvant" means any wetting agent, spreading agent, deposit builder, adhesive, emulsifying agent, dellocculating agent, water modifier, or similar agent with or without toxic properties of its own intended to be used with any other pesticide as an aid to the application or to the effect thereof, and which is in a package or container separate from that of the pesticide with which it is to be used.

(12) "Pest" means, but is not limited to, any insect, other arthropod, fungus, rodent, nematode, mollusk, weed and any form of plant or animal life or virus (except virus on or in living man or other animal) which is normally considered to be a pest or which the director may declare by regulation to be a pest.

(13) "Nematode" means any invertebrate animal of the phylum nemathelminthes and class nematoda, that is, unsegmented round worms with elongated, fusiform, or saclike bodies covered with cuticle, and inhabiting soil, water, plants or plant parts; may also be called nemas or eelworms.

(14) "Arthropod" means any invertebrate animal that belongs to the phylum arthropoda, which in addition to insects, includes allied classes whose members are wingless and usually have more than six legs, for example, spiders, mites, ticks, centipedes, and isopod crustaceans.

(15) "Insects" means any of the numerous small invertebrate animals whose bodies, in the adult stage, are more or less obviously segmented with six legs and usually with two pairs of wings, belonging to the class insecta, for example, aphids, beetles, bugs, bees, and flies.

(16) "Fungi" means all non chlorophyll bearing thallophytes (that is, all non chlorophyll bearing plants of a lower order than mosses and liverworts), for example, rusts, smuts, mildews, molds, yeasts, and bacteria, except those on or in living man or other animals.

(17) "Weed" means any plant which grows where not wanted.

(18) "Mollusk" means any invertebrate animal characterized by a soft unsegmented body usually partially or wholly enclosed in a calcareous shell, having a foot and mantel, for example, slugs and snails.

(19) "Restricted use pesticide" means any pesticide or device

which the director has found and determined subsequent to hearing under the provisions of chapter 17.21 RCW Washington pesticide application act or this chapter as enacted or hereafter amended, to be so injurious to persons, pollinating insects, bees, animals, crops, wildlife, or lands other than the pests it is intended to prevent, destroy, control, or mitigate that additional restrictions are required.

(20) "Distribute" means to offer for sale, hold for sale, sell, barter, or supply pesticides in this state.

(21) "Pesticide dealer" means any person who distributes any of the following pesticides:

(a) "Highly toxic pesticides" and/or

(b) "EPA restricted use pesticides" or "restricted use pesticides" which by regulation are restricted to distribution by licensed pesticide dealers only and/or

(c) Any other pesticide except spray adjuvants and those pesticides which are labeled and intended for home and garden use only.

(22) "Pesticide dealer manager" means the owner or other individual supervising pesticide distribution at one outlet holding a pesticide dealer license.

(23) "Pest control consultant" means any individual who offers or supplies technical advice, supervision or aid or makes recommendations to the user of:

(a) "Highly toxic pesticides" and/or

(b) "EPA restricted use pesticides" or "restricted use pesticides" which are restricted by regulation to distribution by licensed pesticide dealers only and/or

(c) Any other pesticides except spray adjuvants and those pesticides which are labeled and intended for home and garden use only.

(24) "Ingredient statement" means a statement of the name and percentage of each active ingredient together with the total percentage of the inert ingredients in the pesticide, and when the pesticide contains arsenic in any form, the ingredient statement [illegible] of total and water soluble arsenic,

each calculated as elemental arsenic: PROVIDED, That in the case of a spray adjuvant the ingredient statement need contain only the names of the principal functioning agents and the total percentage of the constituents ineffective as spray adjuvants. If more than three functioning agents are present, only the three principal ones need be named.

(25) "Active ingredient" means any ingredient which will prevent, destroy, repel, control, or mitigate pests, or which will act as a plant regulator, defoliant, desiccant, or spray adjuvant.

(26) "Inert ingredient" means an ingredient which is not an active ingredient.

(27) "Antidote" means the most practical immediate treatment in case of poisoning and includes first aid treatment.

(28) "Person" means any individual, partnership, association, corporation, or organized group of persons whether or not incorporated.

(29) "Department" means the department of agriculture of the state of Washington.

(30) "Director" means the director of the department or his duly authorized representative.

(31) "Registrant" means the person registering any pesticide pursuant to the provisions of this chapter.

(32) "Label" means the written, printed, or graphic matter on, or attached to, the pesticide or device or the immediate container thereof, and the outside container or wrapper of the retail package.

(33) "Labeling" means all labels and other written, printed or graphic matter:

(a) Upon the pesticide or device or any of its containers or wrappers;

(b) Accompanying the pesticide, or referring to it in any other media used to disseminate information to the public; and

(c) To which reference is made on the label or in literature accompanying or referring to the pesticide or device except when accurate nonmisleading reference is made to current official publications of the department, United States department of agriculture, interior, health, education and welfare, state

agricultural colleges and other similar federal or state institutions or agencies authorized by law to conduct research in the field of pesticides.

(34) "Highly toxic" means any highly toxic pesticide as determined by the director under RCW 15.58.040.

(35) "Pesticide advisory board" means the pesticide advisory board as provided for in the Washington pesticide application act as enacted or hereafter amended.

(36) "Land" means all land and water areas, including airspace and all plants, animals, structures, buildings, devices and contrivances, appurtenant thereto or situated thereon, fixed or mobile, including any used for transportation.

(37) "Regulation" means rule or regulation.

(38) "EPA" means the United States environmental protection agency.

(39) "EPA restricted use pesticide" means any pesticide with restricted uses as classified for restricted use by the administrator, EPA.

(40) "FIFRA" means the federal insecticide, fungicide and rodenticide act as amended (61 Stat. 163, 7 U.S.C. Sec. 135).

(41) "Special local needs registration" means a registration issued by the director pursuant to provisions of section 24(c) of FIFRA.

(42) "Unreasonable adverse effects on the environment" means any unreasonable risk to man or the environment taking into account the economic, social and environmental costs and benefits of the use of any pesticide, or as otherwise determined by the director.

(43) "Master license system" means the mechanism established by chapter 19.02 RCW by which master licenses, endorsed for individual state issued licenses, are issued and renewed utilizing a master application and a master license expiration date common to each renewable license endorsement)) "Active ingredient" means any ingredient which will prevent, destroy, repel, control, or mitigate pests, or which will act as a plant regulator, defoliant, desiccant, or spray adjuvant.

(2) "Antidote" means the most practical immediate treatment in case of poisoning and includes first aid treatment.

(3) "Arthropod" means any invertebrate animal that belongs to the phylum arthropoda, which in addition to insects, includes allied classes whose members are wingless and usually have more than six legs; for example, spiders, mites, ticks, centipedes, and isopod crustaceans.

(4) "Defoliant" means any substance or mixture of substances intended to cause the leaves or foliage to drop from a plant with or without causing abscission.

(5) "Department" means the Washington state department of agriculture.

(6) "Desiccant" means any substance or mixture of substances intended to artificially accelerate the drying of plant tissues.

(7) "Device" means any instrument or contrivance intended to trap, destroy, control, repel, or mitigate pests, or to destroy, control, repel or mitigate fungi, nematodes, or such other pests, as may be designated by the director, but not including equipment used for the application of pesticides when sold separately from the pesticides.

(8) "Director" means the director of the department or a duly authorized representative.

(9) "Distribute" means to offer for sale, hold for sale, sell, barter, or supply pesticides in this state.

(10) "EPA" means the United States environmental protection agency.

(11) "EPA restricted use pesticide" means any pesticide with restricted uses as classified for restricted use by the administrator, EPA.

(12) "FIFRA" means the federal insecticide, fungicide, and rodenticide act as amended (61 Stat. 163, 7 U.S.C. Sec. 136 et seq.).

(13) "Fungi" means all nonchlorophyll-bearing thallophytes (all nonchlorophyll-bearing plants of a lower order than mosses and liverworts); for example, rusts, smuts, mildews, molds, yeasts, and bacteria, except those on or in living persons or other animals.

(14) "Fungicide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any fungi

(15) "Herbicide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any weed.

(16) "Inert ingredient" means an ingredient which is not an active ingredient.

(17) "Ingredient statement" means a statement of the name and percentage of each active ingredient together with the total percentage of the inert ingredients in the pesticide, and when the pesticide contains arsenic in any form, the ingredient statement shall also include percentages of total and water soluble arsenic, each calculated as elemental arsenic. In the case of a spray adjuvant the ingredient statement need contain only the names of the principal functioning agents and the total percentage of the constituents ineffective as spray adjuvants. If more than three functioning agents are present, only the three principal ones need by named.

(18) "Insect" means any of the numerous small invertebrate animals whose bodies are more or less obviously segmented, and which for the most part belong to the class insecta, comprising six-legged, usually winged forms, for example, beetles, bugs, bees, flies, and to other allied classes of arthropods whose members are wingless and usually have more than six legs, for example, spiders, mites, ticks, centipedes, and isopod crustaceans.

(19) "Insecticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any insects which may be present in any environment whatsoever.

(20) "Label" means the written, printed, or graphic matter on, or attached to, the pesticide, device, or immediate container, and the outside container or wrapper of the retail package.

(21) "Labeling" means all labels and other written, printed, or graphic matter:

(a) Upon the pesticide, device, or any of its containers or wrappers;

(b) Accompanying the pesticide, or referring to it in any other media used to disseminate information to the public; and

(c) To which reference is made on the label or in literature [illegible] pesticide or device except when

accurate nonmisleading reference is made to current official publications of the department, United States departments of agriculture; interior; education; health and human services; state agricultural colleges; and other similar federal or state institutions or agencies authorized by law to conduct research in the field of pesticides.

(22) "Land" means all land and water areas, including airspace and all plants, animals, structures, buildings, devices and contrivances, appurtenant thereto or situated thereon, fixed or mobile, including any used for transportation.

(23) "Master license system" means the mechanism established by chapter 19.02 RCW by which master licenses, endorsed for individual state-issued licenses, are issued and renewed using a master application and a master license expiration date common to each renewable license endorsement.

(24) "Nematocide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate nematodes.

(25) "Nematode" means any invertebrate animal of the phylum nemathelminthes and class nematoda, that is, unsegmented round worms with elongated, fusiform, or sacklike bodies covered with cuticle, and inhabiting soil, water, plants or plant parts, may also be called nemas or eelworms.

(26) "Person" means any individual, partnership, association, corporation, or organized group of persons whether or not incorporated.

(27) "Pest" means, but is not limited to, any insect, rodent, nematode, snail, slug, weed and any form of plant or animal life or virus, except virus on or in a living person or other animal, which is normally considered to be a pest or which the director may declare to be a pest.

(28) "Pest control consultant" means any individual who sells or offers for sale at other than a licensed pesticide dealer outlet or location, or who offers or supplies technical advice, supervision, or aid, or makes recommendations to the user of

(a) Highly toxic pesticides, as determined under Part I, Section

(b) EPA restricted use pesticides or restricted use pesticides

which are restricted by rule to distribution by licensed pesticide dealers only; or

(c) Any other pesticide except those pesticides which are labeled and intended for home and garden use only.

(29) "Pesticide" means, but is not limited to:

(a) Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, snail, slug, fungus, weed, and any other form of plant or animal life or virus, except virus on or in a living person or other animal which is normally considered to be a pest or which the director may declare to be a pest;

(b) Any substance or mixture of substances intended to be used as a plant regulator, defoliant or desiccant; and

(c) Any spray adjuvant.

(30) "Pesticide advisory board" means the pesticide advisory board as provided for in the Washington pesticide application act.

(31) "Pesticide dealer" means any person who distributes any of the following pesticides:

(a) Highly toxic pesticides, as determined under RCW 15.58.040;

(b) EPA restricted use pesticides or restricted use pesticides which are restricted by rule to distribution by licensed pesticide dealers only; or

(c) Any other pesticide except those pesticides which are labeled and intended for home and garden use only.

(32) "Pesticide dealer manager" means the owner or other individual supervising pesticide distribution at one outlet holding a pesticide dealer license.

(33) "Plant regulator" means any substance or mixture of substances intended through physiological action, to accelerate or retard the rate of growth or maturation, or to otherwise alter the behavior of ornamental or crop plants or their produce, but shall not include substances insofar as they are intended to be used as plant nutrients, trace elements, nutritional chemicals, plant inoculants, or soil amendments.

(34) "Registrant" means the person registering any pesticide under the provisions of this chapter.

(35) "Restricted use pesticide" means any pesticide or device which, when used as directed or in accordance with a widespread and commonly recognized practice, the director determines, subsequent to a hearing, requires additional restrictions for that use to prevent unreasonable adverse effects on the environment including people, lands, beneficial insects, animals, crops, and wildlife, other than pests.

(36) "Rodenticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate rodents, or any other vertebrate animal which the director may declare by rule to be a pest.

(37) "Spray adjuvant" means any wetting agent, spreading agent, deposit builder, adhesive, emulsifying agent, deflocculating agent, water modifier, or similar agent with or without toxic properties of its own, intended to be used with any other pesticide as an aid to the application or to the effect of the pesticide, and which is in a package or container separate from that of the pesticide with which it is to be used.

(38) "Special local needs registration" means a registration issued by the director pursuant to provisions of section 24(c) of FIFRA.

(39) "Unreasonable adverse effects on the environment" means any unreasonable risk to people or the environment taking into account the economic, social, and environmental costs and benefits of the use of any pesticide, or as otherwise determined by the director.

(40) "Weed" means any plant which grows where not wanted.

Sec. 2. Section 4, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.040 are each amended to read as follows:

(1) The director shall administer and enforce the provisions of this chapter and ((regulations)) rules adopted ((thereunder)) under this chapter. All the authority and requirements provided for in chapter ((34.04)) 34.05 RCW (Administrative Procedure Act) and chapter ((42.32)) 42.30 RCW shall apply to this chapter in the adoption of ((regulations)) rules, including those requiring due notice and a hearing for the adoption of permanent ((regulations)) rules.

(2) The director is authorized to adopt appropriate ((regulations)) rules for carrying out the purpose and provisions of this chapter, including but not limited to ((regulations)) rules providing for:

(a) Declaring as a pest any form of plant or animal life or virus which is injurious to plants, ((men)) people, animals (domestic or otherwise), land, articles, or substances;

(b) Determining that certain pesticides are highly toxic to ((man. The director shall, in making this determination, be guided by the federal definition of highly toxic, as defined in Title 7, code of federal regulations 362.8 as issued or hereafter amended)) people. For the purpose of this chapter, highly toxic pesticide means any pesticide that conforms to the criteria in 40 C.F.R. Sec. 162.10 for ~ city category I due to oral inhalation or dermal toxicity. The director shall publish a list of all pesticides, determined to be highly toxic, by their common or generic name and their trade or brand name if practical. Such list shall be kept current and shall, upon request, be made available to any interested party;

(c) Determining standards for denaturing pesticides by color, taste, odor, or form;

(d) The collection and examination of samples of pesticides or devices;

(e) The safe handling, transportation, storage, display, distribution, and disposal of pesticides and their containers;

(f) Restricting or prohibiting the use of certain types of containers or packages for specific pesticides. These restrictions may apply to type of construction, strength, and/or size to alleviate danger of spillage, breakage, misuse, or any other hazard to the public. The director shall be guided by federal regulations concerning pesticide containers;

(g) Procedures in making of pesticide recommendations;

(h) Adopting a list of restricted use pesticides for the state or for designated areas within the state if the director determines that such pesticides may require ((regulations)) rules restricting or

the ((regulation)) rule the time and conditions of distribution or use of such restricted use pesticides and may, if ((he deems)) it is found necessary to carry out the purpose and provisions of this chapter, require that any or all restricted use pesticides shall be purchased, possessed, or used only under permit of the director and under ((his)) the director's direct supervision in certain areas and/or under certain conditions or in certain quantities or concentrations((; PROVIDED, That)). The director may require all persons issued such permits to maintain records as to the use of all the restricted use pesticides;

(i) Label requirements of all pesticides required to be registered under provisions of this chapter; and

(j) Regulating the labeling of devices.

(3) For the purpose of uniformity and to avoid confusion endangering the public health and welfare the director may adopt ((regulations)) rules in conformity with the primary pesticide standards, particularly as to labeling, established by the United States ((department of agriculture)) environmental protection agency or any other federal agency.

Sec. 3. Section 5, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.050 are each amended to read as follows:

Every pesticide which is distributed within this state or delivered for transportation or transported in intrastate commerce or between points within this state through any point outside this state shall be registered with the director subject to the provisions of this chapter. Such registration shall be renewed annually prior to January 1: PROVIDED, That registration is not required if a pesticide is shipped from one plant or warehouse to another plant or warehouse operated by the same person and used solely at such plant or warehouse as a constituent part to make a pesticide which is registered under the provisions of this chapter((; (i) the pesticide is not sold and if the container thereof is plainly and conspicuously marked "For Experimental Use Only - Not To Be Sold", together with the manufacturer's name and address)); or if a written permit has been obtained from the director to ((sell)) distribute or use the specific subject to restrictions and

conditions set forth in the permit.

Sec. 4. Section 6, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.060 are each amended to read as follows:

(1) The applicant for registration shall file a statement with the department which shall include:

(a) The name and address of the applicant and the name and address of the person whose name will appear on the label, if other than the applicant's;

(b) The name of the pesticide;

(c) The complete formula of the pesticide, including the active and inert ingredients; PROVIDED, That confidential business information of a proprietary nature is not made available to any other person and is exempt from disclosure as a public record, as provided by RCW 42.17.260;

(d) Other necessary information required for completion of the department's application for registration form; and

((~~(d)~~)) (e) A complete copy of the labeling accompanying the pesticide and a statement of all claims to be made for it, including the directions and precautions for use.

(2) ((~~The director, when he deems it necessary in the administration of this chapter, may require the submission of the complete formula of any pesticide including the active and inert ingredients.~~

(3))) The director may require a full description of the tests made and the results thereof upon which the claims are based.

((~~(4)~~)) (3) The director may prescribe other necessary information by ((~~regulation~~)) rule.

Sec. 5. Section 4, chapter 146, Laws of 1979 and RCW 15.58.065 are each amended to read as follows:

(1) In submitting data required by this chapter, the applicant may:

(a) Mark clearly any portions ((~~thereof~~)) which in ((~~his~~)) the applicant's opinion are trade secrets or commercial or financial information; and

(b) Submit such marked material separately from other material

required to be submitted under this chapter.

(2) Notwithstanding any other provision of this chapter or other law, the director shall not make public information which in ((~~his~~)) the director's judgment should be privileged or confidential because it contains or relates to trade secrets or commercial or financial information except that, when necessary to carry out the provisions of this chapter, information relating to unpublished formulas of products acquired by authorization of this chapter may be revealed to any state or federal agency consulted and may be revealed at a public hearing or in findings of fact issued by the director when necessary under this chapter.

(3) If the director proposes to release for inspection information which the applicant or registrant believes to be protected from disclosure under subsection (2) of this section, ((~~he~~)) the director shall notify the applicant or registrant in writing, by certified mail. The director shall not thereafter make available for inspection such data until thirty days after receipt of the notice by the applicant or registrant. During this period, the applicant or registrant may institute an action in the superior court of Thurston county for a declaratory judgment as to whether such information is subject to protection under subsection (2) of this section.

Sec. 6. Section 7, chapter 190, Laws of 1971 ex. sess. as amended by section 2, chapter 95, Laws of 1983 and RCW 15.58.070 are each amended to read as follows:

(1) Any person desiring to register a pesticide with the department shall pay to the director an annual registration fee ((~~of twenty--dollars~~)) for each pesticide registered by the department for such person. The registration fee for the registration of pesticides for any one person during a calendar year shall be: One hundred five dollars for each of the first twenty five pesticides registered; one hundred dollars for each of the twenty-sixth through one-hundredth pesticides registered; seventy-five dollars for each of the one hundred first through one hundred fiftieth pesticides registered; and fifty dollars for each additional pesticide registered. In addition, the department may establish by rule a registration fee not to exceed

ten dollars for each registered product labeled and intended for home and garden use only. The revenue generated by the home and garden use only fees shall be deposited in the agriculture—local fund, to be used to assist in funding activities of the pesticide incident reporting and tracking review panel. All pesticide registrations expire on December 31st of each year.

(2) Any registration approved by the director and in effect on the 31st day of December for which a renewal application has been made and the proper fee paid, continues in full force and effect until the director notifies the applicant that the registration has been renewed, or otherwise denied in accord with the provision of RCW 15.58.110.

Sec. 7. Section 8, chapter 190, Laws of 1971 ex. sess. as amended by section 3, chapter 95, Laws of 1983 and RCW 15.58.080 are each amended to read as follows:

If the renewal of a pesticide registration is not filed before January 1st of each year, an additional fee of ((ten)) twenty-five dollars shall be assessed and added to the original fee. The additional fee shall be paid by the applicant before the registration renewal for that pesticide shall be issued unless the applicant furnishes an affidavit certifying that ((he)) the applicant did not distribute the unregistered pesticide during the period of nonregistration. The payment of the additional fee is not a bar to any prosecution for doing business without proper registry.

Sec. 8. Section 11, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.110 are each amended to read as follows:

(1) If it does not appear to the director that the pesticide is such as to warrant the proposed claims for it or if the pesticide and its labeling and other material required to be submitted do not comply with the provisions of this chapter or ((regulations)) rules adopted ((thereunder--he--shall--notify)) under this chapter, the registrant shall be notified of the manner in which the pesticide, labeling, or other material required to be submitted fails to comply with the provisions of this chapter so as to afford the applicant an opportunity to make the necessary corrections. If, upon receipt of such notice, the applicant does not make the corrections the director shall refuse to register the pesticide. The applicant may request a hearing as provided for in chapter ((34.04)) 34.05 RCW.

(2) The director may, when ((he)) the director determines that a pesticide or its labeling does not comply with the provisions of this chapter or the ((regulations)) rules adopted ((thereunder)) under this chapter, cancel the registration of a pesticide after a hearing in accordance with the provisions of chapter ((34.04)) 34.05 RCW.

Sec. 9. Section 12, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.120 are each amended to read as follows:

The director may, when ((he)) the director determines that there is or may be an imminent hazard to the public health and welfare, suspend on ((his)) the director's own motion, the registration of a pesticide in conformance with the provisions of chapter ((34.04)) 34.05 RCW.

Sec. 10. Section 13, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.130 are each amended to read as follows:

The term "misbranded" shall apply:

(1) To any pesticide or device if its labeling bears any statement, design, or graphic representation relative thereto or to its ingredients which is false or misleading in any particular;

(2) To any pesticide:

(a) If it is an imitation of or is offered for sale under the name of another pesticide;

(b) If its labeling bears any reference to registration under the provision of this chapter unless such reference be required by ((regulations)) rules under this chapter;

(c) If any word, statement, or other information required by this chapter or ((regulations)) rules adopted ((thereunder)) under this chapter to appear on the label or labeling is not prominently placed thereon with such conspicuousness (as compared with other words, statements, designs, or graphic matter in the labeling), and in such terms as to render it likely to be read and understood by the ordinary individual under customary conditions of purchase and use;

(d) If the label does not bear:

(i) The name and address of the manufacturer, registrant or person for whom manufactured;

(ii) Name, brand or trademark under which the pesticide is sold;

(iii) An ingredient statement on that part of the immediate container and on the outside container or wrapper, if there be one, through which the ingredient statement on the immediate container cannot be clearly read, of the retail package which is presented or displayed under customary conditions of purchase: PROVIDED, That the director may permit the ingredient statement to appear prominently on some other part of the container, if the size or form of the container makes it impracticable to place it on the part of the retail package which is presented or displayed under customary conditions of purchase;

(iv) Directions for use and a warning or caution statement which are necessary and which if complied with would be adequate to protect the public and to prevent injury to the public, including living ((man)) people, useful vertebrate animals, useful vegetation, useful invertebrate animals, wildlife, and land; and

(v) The weight or measure of the content, subject to the provisions of chapter 19.94 RCW (state weights and measures act) as enacted or hereafter amended.

(e) If that pesticide contains any substance or substances in quantities highly toxic to ((man)) people, determined as provided by RCW 15.58.040, unless the label bears, in addition to any other matter required by this chapter:

(i) The skull and crossbones;

(ii) The word "POISON" in red prominently displayed on a background of distinctly contrasting color; and

(iii) A statement of an antidote for the pesticide.

(f) If the pesticide container does not bear a label or if the label does not contain all the information required by this chapter or the ((regulations)) rules adopted under this chapter.

(3) To a spray adjuvant when the label fails to state the type or function of the principal functioning agents.

Sec. 11. Section 15, chapter 190, Laws of 1971 ex. sess. as last amended by section 25, chapter 45, Laws of 1987 and RCW 15.58.150 are each amended to read as follows:

(1) It is unlawful for any person to distribute within the state or deliver for transportation or transport in intrastate commerce or between points within this state through any point outside this state any of the following:

(a) Any pesticide which has not been registered pursuant to the provisions of this chapter;

(b) Any pesticide if any of the claims made for it or any of the directions for its use or other labeling differs from the representations made in connection with its registration, or if the composition of a pesticide differs from its composition as represented in connection with its registration: PROVIDED, That at the discretion of the director, a change in the labeling or formula of a pesticide may be made within a registration period without requiring reregistration of the product;

(c) Any pesticide unless it is in the registrant's or the manufacturer's unbroken immediate container and there is affixed to such container, and to the outside container or wrapper of the retail package, if there is one through which the required information on the immediate container cannot be clearly read, a label bearing the information required in this chapter and the ((regulations)) rules adopted under this chapter;

(d) Any pesticide including arsenicals, fluorides, fluosilicates, and/or any other white powdered pesticides unless they have been distinctly denatured as to color, taste, odor, or form if so required by ((regulation)) rule;

(e) Any pesticide which is adulterated or misbranded, or any device which is misbranded;

(f) Any pesticide in containers, violating ((regulations)) rules adopted pursuant to RCW 15.58.040(2)(f) or pesticides found in containers which are unsafe due to damage.

(2) It shall be unlawful:

(a) To sell or deliver any ((restricted use)) pesticide to any person who is required by law or ((regulations)) rules promulgated under such law to be certified, licensed, or have a permit to use or purchase ((such restricted use pesticides)) the pesticide unless such

person or ((his)) the person's agent, to whom sale or delivery is made, has a valid certification, license, or permit to use or purchase the kind and quantity of such ((restricted-use)) pesticide sold or delivered: PROVIDED, That, subject to conditions established by the director, such permit may be obtained immediately prior to sale or delivery from any person designated by the director;

(b) For any person to detach, alter, deface or destroy, wholly or in part, any label or labeling provided for in this chapter or ((regulations)) rules adopted under this chapter, or to add any substance to, or take any substance from, a pesticide in a manner that may defeat the purpose of this chapter or the ((regulations)) rules adopted thereunder;

(c) For any person to use or cause to be used any pesticide contrary to label directions or to regulations of the director if those regulations differ from or further restrict the label directions: PROVIDED, The compliance to the term "contrary to label directions" is enforced by the director consistent with the intent of this chapter;

(d) For any person to use for his or her own advantage or to reveal, other than to the director or proper officials or employees of the state, or to the courts of the state in response to a subpoena, or to physicians, or in emergencies to pharmacists and other qualified persons for use in the preparation of antidotes, any information relative to formulas of products acquired by authority of RCW 15.58.060;

(e) For any person to make false, misleading, or erroneous statements or reports concerning any pest during or after a structural pest inspection or in connection with any pesticide complaint or investigation.

Sec. 12. Section 16, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.160 are each amended to read as follows:

When the director has reasonable cause to believe a pesticide or device is being distributed, stored, or transported in violation of any of the provisions of this chapter, or of any of the prescribed ((regulations)) rules under this chapter, ((he)) the director may

owner or custodian of any such pesticide or device. If the owner or custodian is not available for service of the order ((upon him)), the director may attach the order to the pesticide or device. The pesticide or device shall not be sold, used or removed until the provisions of this chapter have been complied with and the pesticide or device has been released in writing under conditions specified by the director, or the violation has been otherwise disposed of as provided in this chapter by a court of competent jurisdiction.

Sec. 13. Section 17, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.170 are each amended to read as follows:

(1) After service of a "stop sale, use or removal" order is made upon any person, either that person or the director may file an action in a court of competent jurisdiction in the county in which a violation of this chapter or ((regulations)) rules adopted ((thereunder)) under this chapter is alleged to have occurred for an adjudication of the alleged violation. The court in such action may issue temporary or permanent injunctions mandatory or restraining, and such intermediate orders as it deems necessary or advisable. The court may order condemnation of any pesticide or device which does not meet the requirements of this chapter or ((regulations)) rules adopted ((thereunder)) under this chapter: PROVIDED, That no authority is granted hereunder to affect the sale or use of products on which legally approved pesticides have been legally used.

(2) If the pesticide or device is condemned, it shall, after entry of decree, be disposed of by destruction or sale as the court directs, and the proceeds, if such pesticide or device is sold, less cost including legal costs, shall be paid to the state treasury as provided in RCW 15.58.410: PROVIDED, That the pesticide or device shall not be sold contrary to the provisions of this chapter or ((regulations)) rules adopted ((thereunder)) under this chapter. Upon payment of costs and execution and delivery of a good and sufficient bond conditioned that the pesticide or device shall not be disposed of unlawfully, the court may direct that the pesticide or device be delivered to the owner thereof for relabeling or reprocessing as the case may be.

pesticide, court costs, fees, and storage and other proper expenses shall be awarded against the person, if any, appearing as claimant of the pesticide.

Sec. 14. Section 18, chapter 190, Laws of 1971 ex. sess. as last amended by section 4, chapter 95, Laws of 1983 and RCW 15.58.180 are each amended to read as follows:

(1) Except as provided in subsections (4) and (5) of this section, it is unlawful for any person to act in the capacity of a pesticide dealer or advertise as or assume to act as a pesticide dealer without first having obtained an annual license from the director. The license shall expire on the master license expiration date. A license is required for each location or outlet located within this state from which pesticides are distributed. A manufacturer, registrant, or distributor who has no pesticide dealer outlet licensed within this state and who distributes such pesticides directly into this state shall obtain a pesticide dealer license for his or her principal out-of-state location or outlet, but such licensed out-of-state pesticide dealer is exempt from the pesticide dealer manager requirements.

(2) Application for a license shall be accompanied by a ((twenty)) thirty-dollar annual license fee and shall be made through the master license system and shall include the full name of the person applying for the license and the name of the individual within the state designated as the pesticide dealer manager. If the applicant is a partnership, association, corporation, or organized group of persons, the full name of each member of the firm or partnership or the names of the officers of the association or corporation shall be given on the application. The application shall further state the principal business address of the applicant in the state and elsewhere, the name of a person domiciled in this state authorized to receive and accept service of summons of legal notices of all kinds for the applicant, and any other necessary information prescribed by the director.

(3) It is unlawful for any licensed dealer outlet to operate without a pesticide dealer manager who has a license of qualification. The department shall be notified forthwith of any change in the pesticide dealer manager designee during the licensing period.

(4) This section does not apply to (a) a licensed pesticide applicator who sells pesticides only as an integral part of ((his)) the applicator's pesticide application service when such pesticides are dispensed only through apparatuses used for such pesticide application, or (b) any federal, state, county, or municipal agency that provides pesticides only for its own programs.

(5) A user of a pesticide may distribute a properly labelled pesticide to another user who is legally entitled to use that pesticide without obtaining a pesticide dealer's license if the exclusive purpose of distributing the pesticide is keeping it from becoming a hazardous waste as defined in chapter 70.105 RCW.

Sec. 15. Section 20, chapter 190, Laws of 1971 ex. sess. as amended by section 19, chapter 297, Laws of 1981 and RCW 15.58.200 are each amended to read as follows:

The director shall require each pesticide dealer manager to demonstrate to the director ((his)) knowledge of pesticide laws and ((regulations)) rules; pesticide hazards; and the safe distribution, use and application, and disposal of pesticides by satisfactorily passing a written examination after which the director shall issue a license of qualification. Application for a license shall be accompanied by a license fee of ((ten)) fifty dollars. ((The director shall charge a five dollar examination fee for each examination administered on other than a regularly scheduled examination date.)) The pesticide dealer manager license shall ((be valid until revoked or until the director determines relicensing is necessary)) expire on the fifth December 31st after the date of issuance.

Sec. 16. Section 21, chapter 190, Laws of 1971 ex. sess. as amended by section 5, chapter 95, Laws of 1983 and RCW 15.58.210 are each amended to read as follows:

No individual may perform services as a pest control consultant without obtaining from the director an annual license, which license shall expire on the final day of February of each year. Application

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for a license shall be on a form prescribed by the director and shall be accompanied by a fee of ((twenty)) thirty dollars. Licensed commercial pesticide applicators and operators; licensed private-commercial applicators; licensed demonstration and research applicators; employees of federal, state, county, or municipal agencies when acting in their official capacities; and pesticide dealer managers and employees working under the direct supervision of the pesticide dealer manager and only at a licensed pesticide dealer's outlet, are exempt from this licensing provision.

Sec. 17. Section 22, chapter 190, Laws of 1971 ex. sess. as last amended by section 4, chapter 203, Laws of 1986 and RCW 15.58.220 are each amended to read as follows:

For the purpose of this section public pest control consultant means any individual who is employed by a governmental agency or unit to act as a pest control consultant as defined in RCW ((15.58.030(23))) 15.58.030(28). No person shall act as a public pest control consultant on or after February 28, 1973 without first obtaining ((a-nonfee)) an annual license from the director. ((Public-pest-control-consultant-licenses-shall-expire-on-the--fifth--December-31st--from--the--date--of--issuance!---PROVIDED,-That-all-public-pest-control-consultant-licenses-valid-on-December-31,-1985,-shall--expire-on-December-31,-1990.)) Application for a license shall be on a form prescribed by the director((:---PROVIDED,--That)) and shall be accompanied by an annual license fee of fifteen dollars. Federal and state employees whose principal responsibilities are in pesticide research, the jurisdictional health officer or ((his)) a duly authorized representative, public pest control consultants licensed and working in the health vector field, and public operators licensed under RCW 17.21.220 shall be exempt from this licensing provision.

Sec. 18. Section 23, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.230 are each amended to read as follows:

The director shall require each applicant for a pest control consultant's license or a public pest control consultant's license to demonstrate to the director the applicant's knowledge of pesticide laws and regulations; pesticide hazards; and the safe distribution, use and application, and disposal of pesticides by satisfactorily passing a written examination for the classifications for which ((he)) the applicant has applied prior to issuing ((his)) the license. ((An-examination-fee-of-five-dollars-shall-be-charged-when an-examination-is-requested--at--other--than--a--regularly--scheduled examination-date.))

NEW SECTION. Sec. 19. A new section is added to chapter 15.58 RCW to read as follows:

(1) If an application for renewal of a pesticide dealer license is not filed on or before the master license expiration date, the master license delinquency fee shall be assessed under chapter 19.02 RCW and shall be paid by the applicant before the renewal license is issued.

(2) If application for renewal of any license provided for in this chapter other than the pesticide dealer license is not filed on or before the expiration date of the license, a penalty equivalent to the license fee shall be assessed and added to the original fee, and shall be paid by the applicant before the renewal license is issued: PROVIDED, That such penalty shall not apply if the applicant furnishes an affidavit certifying that he or she has not acted as a licensee subsequent to the expiration of the license.

(3) Any license for which a renewal application has been made, all other requirements have been met, and the proper fee paid, continues in full force and effect until the director notifies the applicant that the license has been renewed or the application has been denied.

Sec. 20. Section 24, chapter 190, Laws of 1971 ex. sess. as amended by section 5, chapter 203, Laws of 1986 and RCW 15.58.240 are each amended to read as follows:

The director may classify licenses to be issued under the provisions of this chapter. Such classifications may include but not be limited to agricultural crops, ornamentals, or noncrop land herbicides. If the licensee has a classified license ((he)) the licensee shall be limited to practicing within these classifications. Each such classification shall be subject to separate testing

procedures and requirements: PROVIDED, That no person shall be required to pay an additional license fee if ((such)) the person desires to be licensed in one or all of the license classifications provided for by the director under the authority of this section. The director may charge an examination fee established by the director by rule when an examination is necessary, before a license may be issued or when application for a license and examination is made at other than a regularly scheduled examination date. The director may renew any applicant's license under the classification for which the applicant is licensed, subject to reexamination or other recertification standards as determined by the director when deemed necessary because new knowledge or new classifications are required to carry out the responsibilities of the licensee.

NEW SECTION. Sec. 21. A new section is added to chapter 15.58 RCW to read as follows:

Unless revoked for cause by the director, any registration, license, or permit in effect on the effective date of this section shall continue in full force until its expiration date. Public pest control consultant and pesticide dealer manager licenses valid on December 31, 1985, shall expire on December 31, 1990, and public pest control and pesticide dealer manager licenses issued subsequent to December 31, 1985, and valid on December 31, 1986, shall expire on December 31, 1991.

Sec. 22. Section 25, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.250 are each amended to read as follows:

Any person issued a license or permit under the provisions of this chapter may be required by the director to keep accurate records on a form prescribed by ((him)) the director which may contain the following information:

(1) The delivery, movement or holding of any pesticide or device, including the quantity;

(2) The date of shipment and receipt;

(3) The name of consignor and consignee; and

(4) Any other information, necessary for the enforcement of this chapter, as prescribed by the director.

The director shall have access to such records at any reasonable time to copy or make copies of such records for the purpose of carrying out the provisions of this chapter.

Sec. 23. Section 26, chapter 190, Laws of 1971 ex. sess. as amended by section 2, chapter 158, Laws of 1985 and RCW 15.58.260 are each amended to read as follows:

The director is authorized to impose a civil penalty and/or deny, suspend, or revoke any license, registration or permit provided for in this chapter subject to a hearing and in conformance with the provisions of chapter ((34.04)) 34.05 RCW (Administrative Procedure Act) in any case in which the director finds there has been a failure or refusal to comply with the provisions of this chapter or rules adopted ((hereunder)) under this chapter.

Sec. 24. Section 28, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.280 are each amended to read as follows:

The sampling and examination of pesticides or devices shall be made under the direction of the director for the purpose of determining whether or not they comply with the requirements of this chapter. The director is authorized, upon presentation of proper identification, to enter any distributor's premises, including any vehicle of transport, at all reasonable times in order to have access to pesticides or devices. If it appears from such examination that a pesticide or device fails to comply with the provisions of this chapter or ((regulations)) rules adopted ((thereunder)) under this chapter, and the director contemplates instituting criminal proceedings against any person, the director shall cause notice to be given to such person. Any person so notified shall be given an opportunity to present his views, either orally or in writing, with regard to the contemplated proceedings. If thereafter in the opinion of the director it appears that the provisions of this chapter or ((regulations)) rules adopted ((thereunder)) under this chapter have been violated by such person, the director shall refer a copy of the results of the analysis or the examination of such pesticide or device to the prosecuting attorney for the county in which the violation occurred.

Sec. 25. Section 29, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.290 are each amended to read as follows:

Nothing in this chapter shall be construed as requiring the director to report for prosecution or for the institution of condemnation proceedings minor violations of this chapter when ((he)) the director believes that the public interest will be best served by a suitable notice of warning in writing.

Sec. 26. Section 33, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.330 are each amended to read as follows:

Any person violating any provisions of this chapter or ((regulations)) rules adopted ((thereunder)) under this chapter is guilty of a misdemeanor.

Sec. 27. Section 1, chapter 158, Laws of 1985 and RCW 15.58.335 are each amended to read as follows:

Every person who fails to comply with this chapter or the rules adopted under it may be subjected to a civil penalty, as determined by the director, in an amount of not more than ((one)) seven thousand five hundred dollars for every such violation. Each and every such violation shall be a separate and distinct offense. Every person who, through an act of commission or omission, procures, aids, or abets in the violation shall be considered to have violated this section and may be subject to the civil penalty herein provided.

Sec. 28. Section 34, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.340 are each amended to read as follows:

The director may bring an action to enjoin the violation or threatened violation of any provision of this chapter or any ((regulation)) rule made pursuant to this chapter in a court of competent jurisdiction of the county in which such violation occurs or is about to occur.

NEW SECTION. Sec. 29. A new section is added to chapter 15.58 RCW to read as follows:

Nothing in this chapter shall preclude any person aggrieved by a violation of this chapter from bringing suit in a court of competent jurisdiction to recover damages arising from the violation.

NEW SECTION. Sec. 30. A new section is added to chapter 15.58 RCW to read as follows:

By December 1, 1989, and each subsequent December 1, the department shall report to the appropriate committees of the house of representatives and the senate on the activities of the department under this chapter. The report shall include, at a minimum, a review of the department's enforcement activities, with the number of cases investigated and the number and amount of civil penalties assessed.

Sec. 31. Section 43, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.910 are each amended to read as follows:

The repeal of RCW 15.57.010 through 15.57.930 and the enactment of this chapter shall not be deemed to have repealed any ((regulations)) rules adopted under the provisions of RCW 15.57.010 through 15.57.930 in effect immediately prior to such repeal and not inconsistent with the provisions of this chapter. All such ((regulations)) rules shall be considered to have been adopted under the provisions of this chapter.

NEW SECTION. Sec. 32. A new section is added to chapter 15.58 RCW to read as follows:

Each registration and licensing fee under this chapter is increased by a surcharge of five dollars to be deposited in the agriculture—local fund, provided that an additional one-time surcharge of five dollars shall be collected on January 1, 1990. The revenue raised by the imposition of this surcharge shall be used to assist in funding the pesticide incident reporting and tracking review panel, department of social and health services' pesticide investigations, and the department of agriculture's pesticide investigations.

Sec. 33. Section 2, chapter 249, Laws of 1961 as last amended by section 1, chapter 92, Laws of 1979 and RCW 17.21.020 are each amended to read as follows:

Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) ((~~"Department" means the department of agriculture of the state of Washington.~~

(2) "Director" means the director of the department or his duly appointed representative.

(3) "Person" means a natural person, individual, firm, partnership, corporation, company, society, association, or any organized group of persons whether incorporated or not, and every officer, agent or employee thereof. This term shall import either the singular or plural as the case may be.

(4) "Pest" means, but is not limited to, any insect, rodent, nematode, snail, slug, weed and any form of plant or animal life or virus, except virus on or in living man or other animal, which is normally considered to be a pest or which the director may declare to be a pest.

(5) "Pesticide" means, but is not limited to, (a) any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, nematode, snail, slug, fungus, weed and any other form of plant or animal life or virus, except virus on or in living man or other animal, which is normally considered to be a pest or which the director may declare to be a pest, and (b) any substance or mixture of substances intended to be used as a plant regulator, defoliant or desiccant, and (c) any spray adjuvant, such as a wetting agent, spreading agent, deposit builder, adhesive, emulsifying agent, deflocculating agent, water modifier, or similar agent with or without toxic properties of its own intended to be used with any other pesticide as an aid to the application or effect thereof, and sold in a package or container separate from that of the pesticide with which it is to be used.

(6) "Device" means any instrument or contrivance intended to trap, destroy, control, repel, or mitigate pests or to destroy, control, repel or mitigate fungi, nematodes or such other pests, as may be designated by the director, but not including equipment used for the application of pesticides when sold separately therefrom.

(7) "Fungicide" means any substance or mixture of substances intended to prevent, destroy, repel or mitigate any fungi.

(8) "Rodenticide" means any substance or mixture of substances intended to prevent, destroy, repel or mitigate rodents or any other vertebrate animal which the director may declare to be a pest.

(9) "Herbicide" means any substance or mixture of substances intended to prevent, destroy, repel or mitigate any weed.

(10) "Insecticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any insects which may be present in any environment whatsoever.

(11) "Nematocide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate nematodes.

(12) "Plant regulator" means any substance or mixture of substances intended through physiological action, to accelerate or retard the rate of growth or maturation, or to otherwise alter the behavior of ornamental or crop plants or the produce thereof, but shall not include substances insofar as they are intended to be used as plant nutrients, trace elements, nutritional chemicals, plant inoculants or soil amendments.

(13) "Defoliant" means any substance or mixture of substances intended to cause the leaves or foliage to drop from a plant with or without causing abscission.

(14) "Desiccant" means any substance or mixture of substances intended to artificially accelerate the drying of plant tissues.

(15) "Weed" means any plant which grows where not wanted.

(16) "Insect" means any of the numerous small invertebrate animals whose bodies are more or less obviously segmented, and which for the most part belong to the class insecta, comprising six legged, usually winged forms, as, for example, beetles, bugs, bees, flies, and to other allied classes of arthropods whose members are wingless and usually have more than six legs, as, for example, spiders, mites, ticks, centipedes, and isopod crustaceans.

(17) "Fungi" means all nonchlorophyll bearing thallophytes (that is, all nonchlorophyll bearing plants of a lower order than mosses and liverworts) as, for example, rusts, smuts, mildews, molds, yeasts and bacteria, except those on or in living man or other animals.

(18) "Snails or slugs" include all harmful mollusks.

(19) "Nematode" means any of the nonsegmented roundworms harmful to plants.

(20) "Apparatus" means any type of ground, water or aerial equipment, device, or contrivance using motorized, mechanical or

pressurized power and used to apply any pesticide on land and anything that may be growing, habitating or stored on or in such land, but shall not include any pressurized handized household device used to apply any pesticide or any equipment, device or contrivance of which the person who is applying the pesticide is the source of power or energy in making such pesticide application, or any other small equipment, device, or contrivance that is transported in a piece of equipment licensed under this chapter as an apparatus.

(21) "Restricted use pesticide" means any pesticide use which, when used as directed or in accordance with a widespread and commonly recognized practice, the director determines, subsequent to a hearing, requires additional restrictions for that use to prevent unreasonable adverse effects on the environment including man, lands, beneficial insects, animals, crops, and wildlife, other than pests.

(22) "Engage in business" means any application of pesticides by any person upon lands or crops of another.

(23) "Agricultural crop" means a food intended for human consumption, or a food for livestock the products of which are intended for human consumption, which food shall require cultural treatment of the land for its production.

(24) "Board" means the pesticide advisory board.

(25) "Land" means all land and water areas, including airspace, and all plants, animals, structures, buildings, devices and contrivances, appurtenant thereto or situated thereon, fixed or mobile, including any used for transportation.

(26) "Agricultural commodity" means any plant, or part thereof, or animal, or animal product, produced by a person (including farmers, ranchers, vineyardists, plant propagators, Christmas tree growers, aquaculturists, floriculturists, orchardists, foresters, or other comparable persons) primarily for sale, consumption, propagation, or other use by man or animals.

(27) "Certified applicator" means any individual who is licensed as a pesticide applicator, pesticide operator, public operator, private commercial applicator, or certified private applicator, or any other individual who is certified by the director to use or supervise the use of any pesticide which is classified by the EPA as a restricted use pesticide or by the state as restricted to use by certified applicators only.

(28) "Direct supervision" by certified private applicators shall mean that the designated restricted use pesticide shall be applied for purposes of producing any agricultural commodity on land owned or rented by him or his employer, by a competent person acting under the instructions and control of a certified private applicator who is available if and when needed, even though such certified private applicator is not physically present at the time and place the pesticide is applied. The certified private applicator shall have direct management responsibility and familiarity of the pesticide, manner of application, pest, and land to which the pesticide is being applied. Direct supervision by all other certified applicators means direct on the job supervision.

(29) "EPA" means the United States environmental protection agency.

(30) "EPA restricted use pesticide" means any pesticide with restricted uses as classified for restricted use by the administrator, EPA.

(31) "FIFRA" means the federal insecticide, fungicide and rodenticide act, as amended (61 Stat. 163, 7 U.S.C. Sec. 135).

(32) "Private applicator" means a certified applicator who uses or is in direct supervision of the use of (a) any EPA restricted use pesticide, or (b) any restricted use pesticide restricted to use only by certified applicators by the director, for the purposes of producing any agricultural commodity and for any associated nonfarm application on land owned or rented by him or his employer or if applied without compensation other than trading of personal services between producers of agricultural commodities on the land of another person.

(33) "Private commercial applicator" means a certified applicator who uses or supervises the use of (a) any EPA restricted use pesticide or (b) any restricted use pesticide restricted to use only by certified applicators for purposes other than the production of any agricultural commodity on lands owned or rented by him or his employer.

~~(34) "Unreasonable adverse effects on the environment" means any unreasonable risk to man or the environment taking into account the economic, social and environmental costs and benefits of the use of any pesticide, or as otherwise determined by the director))~~

"Agricultural commodity" means any plant or part of a plant, or animal, or animal product, produced by a person (including farmers, ranchers, vineyardists, plant propagators, Christmas tree growers, aquaculturists, floriculturists, orchardists, foresters, or other comparable persons) primarily for sale, consumption, propagation, or other use by people or animals.

(2) "Apparatus" means any type of ground, water, or aerial equipment, device, or contrivance using motorized, mechanical, or pressurized power and used to apply any pesticide on land and anything that may be growing, habitating, or stored on or in such land, but shall not include any pressurized handsized household device used to apply any pesticide, or any equipment, device, or contrivance of which the person who is applying the pesticide is the source of power or energy in making such pesticide application, or any other small equipment, device, or contrivance that is transported on a piece of equipment licensed under this chapter as an apparatus.

(3) "Arthropod" means any invertebrate animal that belongs to the phylum arthropoda, which in addition to insects, includes allied classes whose members are wingless and usually have more than six legs; for example, spiders, mites, ticks, centipedes, and isopod crustaceans.

(4) "Certified applicator" means any individual who is licensed as a commercial pesticide applicator, commercial pesticide operator, public operator, private-commercial applicator, demonstration and research applicator, or certified private applicator, or any other individual who is certified by the director to use or supervise the use of any pesticide which is classified by the EPA as a restricted use pesticide or by the state as restricted to use by certified applicators only.

(5) "Commercial pesticide applicator" means any person who engages in the business of applying pesticides to the land of another.

(6) "Commercial pesticide operator" means any employee of a commercial pesticide applicator who uses or supervises the use of any pesticide and who is required to be licensed under provisions of this chapter.

(7) "Defoliant" means any substance or mixture of substances intended to cause the leaves or foliage to drop from a plant with or without causing abscission.

(8) "Department" means the Washington state department of agriculture.

(9) "Desiccant" means any substance or mixture of substances intended to artificially accelerate the drying of plant tissues.

(10) "Device" means any instrument or contrivance intended to trap, destroy, control, repel, or mitigate pests, or to destroy, control, repel, or mitigate fungi, nematodes, or such other pests, as may be designated by the director, but not including equipment used for the application of pesticides when sold separately from the pesticides.

(11) "Direct supervision" by certified private applicators shall mean that the designated restricted use pesticide shall be applied for purposes of producing any agricultural commodity on land owned or rented by the applicator or the applicator's employer, by a competent person acting under the instructions and control of a certified private applicator who is available if and when needed, even though such certified private applicator is not physically present at the time and place the pesticide is applied. The certified private applicator shall have direct management responsibility and familiarity of the pesticide, manner of application, pest, and land to which the pesticide is being applied. Direct supervision by all other certified applicators means direct on-the-job supervision. Direct supervision of an aerial apparatus means the pilot of the aircraft must be appropriately certified.

(12) "Director" means the director of the department or a duly authorized representative.

(13) "Engage in business" means any application of pesticides by any person upon lands or crops of another.

(14) "EPA" means the United States environmental protection

agency.

(15) "EPA restricted use pesticide" means any pesticide with restricted uses as classified for restricted use by the administrator, EPA.

(16) "FIFRA" means the federal insecticide, fungicide and rodenticide act as amended (61 Stat. 163, 7 U.S.C. Sec. 136 et seq.).

(17) "Fungi" means all nonchlorophyll-bearing thallophytes (all nonchlorophyll-bearing plants of lower order than mosses and liverworts); for example, rusts, smuts, mildews, molds, yeasts, and bacteria, except those on or in a living person or other animals.

(18) "Fungicide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any fungi.

(19) "Herbicide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any weed.

(20) "In[illegible]" means any of the numerous small invertebrate animals whose bodies are more or less obviously segmented, and which for the most part belong to the class insecta, comprising six-legged, usually winged forms, as, for example, beetles, bugs, bees, flies, and to other allied classes of arthropods whose members are wingless and usually have more than six legs, for example, spiders, mites, ticks, centipedes, and isopod crustaceans.

(21) "Insecticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any insects which may be present in any environment whatsoever.

(22) "Land" means all land and water areas, including airspace and all plants, animals, structures, buildings, devices, and contrivances, appurtenant to or situated on, fixed or mobile, including any used for transportation.

(23) "Nematocide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate nematodes.

(24) "Nematode" means any invertebrate animal of the phylum nemathelminthes and class nematoda, that is, unsegmented round worms with elongated, fusiform, or saclike bodies covered with cuticle, and inhabiting soil, water, plants or plant parts, may also be called nemas or eelworms.

(25) "Person" means any individual, partnership, association,

corporation, or organized group of persons whether or not incorporated.

(26) "Pest" means, but is not limited to, any insect, rodent, nematode, snail, slug, weed, and any form of plant or animal life or virus, except virus on or in a living person or other animal, which is normally considered to be a pest, or which the director may declare to be a pest.

(27) "Pesticide" means, but is not limited to:

(a) Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, snail, slug, fungus, weed, and any other form of plant or animal life or virus except virus on or in a living person or other animal which is normally considered to be a pest or which the director may declare to be a pest;

(b) Any substance or mixture of substances intended to be used as a plant regulator, defoliant or desiccant; and

(c) Any spray adjuvant, such as a wetting agent, spreading agent, deposit builder, adhesive, emulsifying agent, deflocculating agent, water modifier, or similar agent with or without toxic properties of its own intended to be used with any other pesticide as an aid to the application or effect thereof, and sold in a package or container separate from that of the pesticide with which it is to be used.

(28) "Pesticide advisory board" means the pesticide advisory board as provided for in this chapter.

(29) "Plant regulator" means any substance or mixture of substances intended through physiological action, to accelerate or retard the rate of growth or maturation, or to otherwise alter the behavior of ornamental or crop plants or their produce, but shall not include substances insofar as they are intended to be used as plant nutrients, trace elements, nutritional chemicals, plant inoculants, or soil amendments.

(30) "Private applicator" means a certified applicator who uses or is in direct supervision of the use of (a) any EPA restricted use pesticide; or (b) any restricted use pesticide restricted to use only by certified applicators by the director, for the purposes of producing any agricultural commodity and for any associated noncrop

application on land owned or rented by the applicator or the applicator's employer or if applied without compensation other than trading of personal services between producers of agricultural commodities on the land of another person.

(31) "Private-commercial applicator" means a certified applicator who uses or supervises the use of (a) any EPA restricted use pesticide or (b) any restricted use pesticide restricted to use only by certified applicators for purposes other than the production of any agricultural commodity on lands owned or rented by the applicator or the applicator's employer.

(32) "Restricted use pesticide" means any pesticide or device which, when used as directed or in accordance with a widespread and commonly recognized practice, the director determines, subsequent to a hearing, requires additional restrictions for that use to prevent unreasonable adverse effects on the environment including people, lands, beneficial insects, animals, crops, and wildlife, other than pests.

(33) "Rodenticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate rodents, or any other vertebrate animal which the director may declare by rule to be a pest.

(34) "Snails or slugs" include all harmful mollusks.

(35) "Unreasonable adverse effects on the environment" means any unreasonable risk to people or the environment taking into account the economic, social, and environmental costs and benefits of the use of any pesticide, or as otherwise determined by the director.

(36) "Weed" means any plant which grows where not wanted.

Sec. 34. Section 3, chapter 249, Laws of 1961 as last amended by section 26, chapter 45, Laws of 1987 and RCW 17.21.030 are each amended to read as follows:

The director shall administer and enforce the provisions of this chapter and rules adopted hereunder.

(1) The director shall adopt rules:

(a) Governing the application and use, or prohibiting the use, or possession for use, of any pesticide;

(b) Governing the time when, and the conditions under which

restricted use pesticides shall or shall not be used in different areas, which areas may be prescribed by the director, in the state;

(c) Providing that any or all restricted use pesticides shall be purchased, possessed or used only under permit of the director and under the director's direct supervision in certain areas and/or under certain conditions or in certain quantities of concentrations; however, any person licensed to sell such pesticides may purchase and possess such pesticides without a permit;

(d) ((Providing that all permittees shall keep records as required of licensees under RCW 17.21.100)) Establishing recordkeeping requirements for licensees, permittees, and certified applicators;

(e) Fixing and collecting examination fees; ((and))

(f) Establishing testing procedures, licensing classifications, and requirements for licenses and permits as provided by this chapter; and

(g) Fixing and collecting permit fees.

(2) The director may adopt any other rules necessary to carry out the purpose and provisions of this chapter.

Sec. 35. Section 4, chapter 249, Laws of 1961 and RCW 17.21.040 are each amended to read as follows:

All rules adopted under the provisions of this chapter shall be subject to the provisions of chapter ((34.04)) 34.05 RCW as enacted or hereafter amended, concerning the adoption of rules.

Sec. 36. Section 5, chapter 249, Laws of 1961 as amended by section 4, chapter 158, Laws of 1985 and RCW 17.21.050 are each amended to read as follows:

All hearings for the imposition of a civil penalty and/or the suspension, denial or revocation of a license issued under the provisions of this chapter shall be subject to the provisions of chapter ((34.04)) 34.05 RCW ((as enacted or hereafter amended, concerning contested cases)).

Sec. 37. Section 7, chapter 249, Laws of 1961 as last amended by section 21, chapter 297, Laws of 1981 and RCW 17.21.070 are each amended to read as follows:

It shall be unlawful for any person to engage in the business of applying pesticides to the land of another without a commercial pesticide applicator((!s)) license. ((Application-for-such-a-license shall--be--made--on--or--before--January--1st--of--each-year.--Such)) Application for the license shall be accompanied by a fee of one hundred twenty-five dollars and in addition ((thereto)) a fee of ten dollars for each apparatus, exclusive of one, used by the applicant in the application of pesticides: PROVIDED, That the provisions of this section shall not apply to any person employed only to operate any apparatus used for the application of any pesticide, and in which such person has no financial interest or other control over such apparatus other than its day to day mechanical operation for the purpose of applying any pesticide. Commercial pesticide applicator licenses shall expire on December 31st following their issuance.

Sec. 38. Section 8, chapter 249, Laws of 1961 as amended by section 4, chapter 177, Laws of 1967 and RCW 17.21.080 are each amended to read as follows:

Application for a commercial pesticide applicator((!s)) license provided for in RCW 17.21.070 shall be on a form prescribed by the director and shall include the following:

(1) The full name of the person applying for such license.

(2) If the applicant is an individual, receiver, trustee, firm, partnership, association, corporation, or any other organized group of persons whether incorporated or not, the full name of each member of the firm or partnership, or the names of the officers of the association, corporation or group.

(3) The principal business address of the applicant in the state and elsewhere.

(4) The name of a person whose domicile is in the state, and who is authorized to receive and accept services of summons and legal notice of all kinds for the applicant.

(5) The model, make, horsepower, and size of any apparatus used by the applicant to apply pesticides.

(6) License classification or classifications the applicant is applying for.

Sec. 39. Section 10, chapter 249, Laws of 1961 as last amende by section 28, chapter 45, Laws of 1987 and RCW 17.21.100 are eac amended to read as follows:

(1) Except as provided in subsection (7) of this section pesticide applicators licensed under the provisions of this chapte and all persons applying pesticides to more than one acre o agricultural land in a calendar year, including public entitie engaged in roadside spraying of pesticides, shall keep records on form prescribed by the director which shall include the following:

(((1) The name of the person for whom the pesticide was applied;

(2))) (a) The location of the land where the pesticide w applied.

(((3))) (b) The year, month, day and time the pesticide w applied.

(((4) The trade name and/or the common name)) (c) The produ name used on the registered label and the United States environment protection agency registration number, if applicable, of t pesticide which was applied.

(((5))) (d) The crop or site to which the pesticide was applied

(e) The amount of pesticide applied per acre or other appropria measure.

(f) The concentration of pesticide that was applied.

(g) The number of acres, or other appropriate measure, to whi the pesticide was applied.

(h) The licensed applicator's name, address, and telephone numb and the name of the individual or individuals making the applicatio

(i) The direction and estimated velocity of the wind at the ti the pesticide was applied: PROVIDED, That this subsection ((does (i) shall not apply to applications of baits in bait stations a pesticide applications within structures.

(((6))) (j) Any other reasonable information required by t director.

(((7))) (2) Records shall be updated on the same day that pesticide is applied.

(3) Such records shall be kept for a period of ((three)) se years from the date of the application of the pesticide to which su

records refer, and the director shall, upon request in writing, be furnished with a copy of such records forthwith by the licensee: PROVIDED, That the director may require the submission of such records within thirty days of the application of any restricted use pesticide in prescribed areas controlling the use of such restricted use pesticide.

(4) The pesticide records shall be readily available to: The department; treating medical personnel initiating diagnostic testing or therapy for a patient with a suspected case of pesticide poisoning; the department of social and health services; the pesticide incident reporting and tracking panel; and, in the case of an industrial insurance claim filed under Title 51 RCW with the department of labor and industries, the employee or the employee's designated representative and the department of labor and industries.

(5) If a request for information is made under subsection (4) of this section from an applicator referred to in subsection (1) of this section and the applicator refuses to provide a copy of the records, the department shall be notified of the request and the applicator's refusal. Within seven working days, the department shall request that the applicator provide the department with all pertinent copies, except that in a medical emergency the request shall be made within two working days. The applicator shall provide copies of the records to the department within twenty-four hours after the department's request.

(6) The department of agriculture and the department of labor and industries shall jointly adopt, by rule, one form that satisfies the information requirements of this section and section 77 of this act. Records kept on the prescribed form under section 77 of this act may be used to comply with this section.

(7) This section shall not apply to the owner or operator of a dairy farm with respect to his or her application of pesticides to the farm.

Sec. 40. Section 11, chapter 249, Laws of 1961 as last amended by section 22, chapter 297, Laws of 1981 and RCW 17.21.110 are each amended to read as follows:

It shall be unlawful for any person to act as an employee of a

commercial pesticide applicator and apply pesticides manually or as the operator directly in charge of any apparatus which is licensed or should be licensed under the provisions of this chapter for the application of any pesticide, without having obtained ((an operator's)) a commercial pesticide operator license from the director. ((Such an operator's)) The commercial pesticide operator license shall be in addition to any other license or permit required by law for the operation or use of any such apparatus. ((Any person applying for such an operator's license shall file an application an a form prescribed by the director on or before January 1st of each year. Such application shall state the classifications the applicant is applying for and whether the applicant intends to apply pesticides manually or to operate either a ground or aerial apparatus, or both, for the application of pesticides.)) Application for a license to apply pesticides manually and/or to operate ground apparatuses shall be accompanied by a license fee of ((twenty)) thirty dollars. Application for a license to operate an aerial apparatus shall be accompanied by a license fee of ((twenty)) thirty dollars. The provisions of this section shall not apply to any individual who ((has passed the examination provided for in RCW 17.21.090, and)) is a licensed commercial pesticide applicator. Commercial pesticide operator licenses shall expire on December 31st following their issuance.

Sec. 41. Section 6, chapter 92, Laws of 1979 and RCW 17.21.122 are each amended to read as follows:

It shall be unlawful for any person to act as a private-commercial applicator without having obtained a private-commercial applicator(('s)) license from the director. ((Any person applying for such private commercial applicator's license shall file an application on a form prescribed by the director. Such application shall state the classifications the applicant is applying for and the method in which these pesticides are to be applied.)) Application for a private-commercial applicator license ((to apply pesticides)) shall be accompanied by a license fee of ((twenty)) fifty dollars before a license may be issued. ((The)) Private-commercial applicator licenses issued by the director shall ((be valid until

((revoked--or--until--the--director--determines-that-reeertifieation-is neeessary)) expire on the fifth December 31st after the date of issuance.

Sec. 42. Section 8, chapter 92, Laws of 1979 and RCW 17.21.120 are each amended to read as follows:

It shall be unlawful for any person to act as a private applicator without first complying with the certification requirements determined by the director as necessary to prevent unreasonable adverse effects on the environment, including injury to the applicator or other persons, for that specific pesticide use. Certification standards to determine the individual's competency with respect to the use and handling of the pesticide or class of pesticides the private applicator is to be certified to use shall be relative to hazards according to RCW 17.21.030 as now or hereafter amended. In determining these standards the director shall take into consideration standards of the EPA and is authorized to adopt by ((regulation)) rule these standards. ((A)) Application for private applicator certification shall be accompanied by a license fee of fifteen dollars before a certification may be issued. Private applicator certification issued by the director shall ((be--valid until--revoked--or--the-director-determines-that-a-reeertifieation-is neeessary)) expire on December 31st following issuance: PROVIDED, That private applicator certifications valid on July 1, 1989, shall expire on December 31, 1989. If the director does not qualify ((the)) a private applicator under this section, ((he)) the director shall inform the applicant in writing.

Sec. 43. Section 26, chapter 297, Laws of 1981 as amended by section 30, chapter 45, Laws of 1987 and RCW 17.21.120 are each amended to read as follows:

Except as provided in RCW 17.21.203(1), it is unlawful for a person to use or supervise the use of any pesticide which is restricted to use by certified applicators, on small experimental plots for research purposes when no charge is made for the pesticide and its application, without a demonstration and research applicator's license.

((Demonstration--and-research-applieators-shall-be-subjeet-to-the reeord-keeping-requirements-of-RCW-17.21.100.--The-director-shall-not issue-a-demonstration-and-research-license-until--the--applieant--has passed--an--examination-to-demonstrate-(1)-the-applieant's-ability-to apply-pestieides-in-the-elassifieations--the--applieant--has--applied for,--and--(2)--the-applieant's-knowledge-of-the-nature-and-effeet-of pestieides-applied-manually-or-used-in-sueh--apparatuses--under--sueh elassifieations.))

A license fee of ((twenty)) fifty dollars shall be paid before a demonstration and research license may be issued. ((The--director shall--eharge--an-examination-fee-established-by-the-director-by-rule for-eaeh-examination-administered-on-other-than-a-regularly-seheduled examination-date.)) The demonstration and research applicator(('s)) license shall ((be--valid--until--revoked--or--until--the--direetor determines-that-reeertifieation-is-neeessary)) expire on the fifth December 31st after the date of issuance.

NEW SECTION. Sec. 44. A new section is added to chapter 17.21 RCW to read as follows:

Any person applying for a license or certification authorized under the provisions of this chapter shall file an application on a form prescribed by the director. The application shall state the license or certification and the classification(s) the applicant is applying for and the method in which the pesticides are to be applied. Application for a license to apply pesticides shall be accompanied by the required fee. Renewal applications shall be filed on or before January 1st of the appropriate year.

NEW SECTION. Sec. 45. A new section is added to chapter 17.21 RCW to read as follows:

(1) The director shall not issue a commercial pesticide applicator license until the applicant, if he or she is the sole owner of the business, or if there is more than one owner, the person managing the business, has passed an examination. The director shall not issue a commercial pesticide operator, public operator, private commercial applicator, or demonstration and research applicator license until the applicant has passed an examination. Such

examinations shall require the applicant to demonstrate to the director knowledge of:

(a) How to apply pesticides under the classification he or she has applied for, manually or with the various apparatuses that he or she may operate;

(b) The nature and effect of pesticides he or she may apply under such classifications; and

(c) Any other matter the director determines to be a necessary subject for examination.

(2) The director shall charge an examination fee established by the director by rule when an examination is necessary before a license may be issued or when application for such license and examination is made at other than a regularly scheduled examination date as provided for by the director.

(3) The director may prescribe separate testing procedures and requirements for each license.

Sec. 46. Section 13, chapter 249, Laws of 1961 as amended by section 10, chapter 203, Laws of 1986 and RCW 17.21.130 are each amended to read as follows:

Any license, permit, or certification provided for in this chapter may be revoked or suspended, and any license, permit, or certification application may be denied by the director for cause.

Sec. 47. Section 14, chapter 249, Laws of 1961 and RCW 17.21.140 are each amended to read as follows:

(1) If the application for renewal of any license provided for in this chapter is not filed on or prior to January 1st ((in any year)) following the expiration date of the license, a penalty of twenty-five ((percent)) dollars for the commercial pesticide applicator's license, and a penalty equivalent to the license fee for any other license, shall be assessed and added to the original fee and shall be paid by the applicant before the renewal license shall be issued: PROVIDED, That such penalty shall not apply if the applicant furnishes an affidavit certifying that he or she has not acted as a ((pesticide applicator or operator)) licensee subsequent to the expiration of ((his)) the license.

(2) Any license for which a timely renewal application has been made, all other requirements have been met, and the proper fee paid, continues in full force and effect until the director notifies the applicant that the license has been renewed or the application has been denied.

Sec. 48. Section 15, chapter 249, Laws of 1961 as last amended by section 4, chapter 191, Laws of 1971 ex. sess. and RCW 17.21.150 are each amended to read as follows:

((The director may deny, suspend, or revoke a license provided for in this chapter if he determines that an applicant or licensee has committed)) A person who has committed any of the following acts((, each of which)) is declared to be ((a)) in violation of this chapter:

(1) Made false or fraudulent claims through any media, misrepresenting the effect of materials or methods to be utilized;

(2) Applied worthless or improper materials;

(3) Operated a faulty or unsafe apparatus;

(4) Operated in a faulty, careless, or negligent manner;

(5) Refused or neglected to comply with the provisions of this chapter, the rules adopted hereunder, or of any lawful order of the director;

(6) Refused or neglected to keep and maintain the records required by ((this chapter)) rule, or to make reports when and as required;

(7) Made false or fraudulent records, invoices, or reports;

(8) Engaged in the business of applying a pesticide without having ((a licensed applicator or operator)) an appropriately licensed person in direct "on-the-job" supervision;

(9) Operated an unlicensed apparatus or an apparatus without a license plate issued for that particular apparatus;

(10) Used fraud or misrepresentation in making an application for a license or renewal of a license;

(11) Is not qualified to perform the type of pest control under the conditions and in the locality in which he or she operates or has operated, regardless of whether or not he or she has previously passed ((an)) a pesticide license examination ((provided for in RCW

17.21.090 and 17.21.120));

(12) Aided or abetted a licensed or an unlicensed person to evade the provisions of this chapter, combined or conspired with such a licensed or an unlicensed person to evade the provisions of this chapter, or allowed one's license to be used by an unlicensed person;

(13) Knowingly made false, misleading or erroneous statements or reports during or after an inspection concerning any infestation or infection of pests found on land or in connection with any pesticide complaint or investigation; ((or))

(14) Impersonated any state, county or city inspector or official; or

(15) Used or supervised the use of a pesticide restricted to use by certified applicators without having a certified applicator in direct supervision.

Sec. 49. Section 16, chapter 249, Laws of 1961 as amended by section 9, chapter 177, Laws of 1967 and RCW 17.21.160 are each amended to read as follows:

The director shall not issue a commercial pesticide applicator(('s)) license until the applicant has furnished evidence of financial responsibility with the director consisting either of a surety bond; or a liability insurance policy or certification thereof, protecting persons who may suffer legal damages as a result of the operations of the applicant: PROVIDED, That such surety bond or liability insurance policy need not apply to damages or injury to agricultural crops, plants or land being worked upon by the applicant. The director shall not accept a surety bond or liability insurance policy except from authorized insurers in this state or if placed as a surplus line as provided for in chapter 48.15 RCW, as enacted or hereafter amended.

Sec. 50. Section 18, chapter 249, Laws of 1961 as last amended by section 31, chapter 45, Laws of 1987 and RCW 17.21.180 are each amended to read as follows:

The ((applicator's)) commercial pesticide applicator license shall, whenever the licensee's surety bond or insurance policy is [illegible] of RCW 17.21.170 be automatically

suspended until such licensee's surety bond or insurance policy again meets the requirements of RCW 17.21.170: PROVIDED, That the director may pick up such licensee's license plates during such period of automatic suspension and return them only at such time as the said licensee has furnished the director with written proof that he or she is in compliance with the provisions of RCW 17.21.170.

Sec. 51. Section 19, chapter 249, Laws of 1961 and RCW 17.21.190 are each amended to read as follows:

Any person suffering property loss or damage resulting from the use or application by others of any pesticide ((must)) shall file with the director a verified report of loss setting forth, so far as known to the claimant, the following:

(1) The name and address of the claimant.

(2) The type, kind, property alleged to be injured or damaged.

(3) The name of the person applying the pesticide and allegedly responsible.

(4) The name of the owner or occupant of the property for whom such application of the pesticide was made.

The report ((must)) shall be filed within ((sixty)) thirty days from the time that the property loss or damage becomes known to the claimant. If a growing crop is alleged to have been damaged, the report ((must)) shall be filed prior to harvest of fifty percent of that crop, unless the loss or damage was not then known. The department shall establish time periods by rule to determine investigation response time. Time periods shall range from immediate to forty-eight hours to initiate an investigation, depending on the severity of the damage.

The filing of such report or the failure to file such a report need not be alleged in any complaint which might be filed in a court of law, and the failure to file the report shall not be considered any bar to the maintenance of any criminal or civil action.

The failure to file such a report shall not be a violation of this chapter. However, if the person failing to file such report is the only one ((injured)) suffering loss from such use or application of a pesticide by a pesticide applicator or operator, the director

revocation of such pesticide applicator's or operator's license until such report is filed)) act upon the complaint.

Sec. 52. Section 20, chapter 249, Laws of 1961 as last amended by section 3, chapter 92, Laws of 1979 and RCW 17.21.200 are each amended to read as follows:

The provisions of this chapter relating to commercial pesticide applicator licenses and requirements for their issuance shall not apply to any forest landowner, or his or her employees, applying pesticides with ground apparatus or manually, on his or her own lands or any lands or rights of way under his or her control or to any farmer owner of ground apparatus applying pesticides for himself or herself or other farmers on an occasional basis not amounting to a principal or regular occupation((, PROVIDED, That such owner)) or to any grounds maintenance person conducting grounds maintenance on an occasional basis not amounting to a regular occupation. However, persons exempt under this section shall not use pesticides restricted to use by certified applicators and shall not advertise or publicly hold ((himself)) themselves out as ((a)) pesticide applicators.

Sec. 53. Section 22, chapter 249, Laws of 1961 as last amended by section 11, chapter 203, Laws of 1986 and RCW 17.21.220 are each amended to read as follows:

(1) All state agencies, municipal corporations, and public utilities or any other governmental agency shall be subject to the provisions of this chapter and rules adopted thereunder concerning the application of pesticides((, PROVIDED, That the operators applying any pesticide restricted to use by certified applicators or in charge of any apparatuses used by any state agencies, municipal corporations and public utilities or any governmental agencies shall be subject to the provisions of RCW 17.21.100, 17.21.110 and 17.21.120, PROVIDED FURTHER, That the director shall issue a limited public operator license without a fee to such operators which shall be valid only when such operators are acting as employees of a state agency, municipal corporation, public utility, or other government agency, AND PROVIDED FURTHER, That)).

(2) It shall be unlawful for any employee of a state agency, municipal corporation, public utility, or any other government agency to use or to supervise the use of any pesticide restricted to use by certified applicators, or any pesticide by means of an apparatus, without having obtained a public operator license from the director. A license fee of fifteen dollars shall be paid before a public operator license may be issued. The license fee shall not apply to public operators licensed and working in the health vector field. Public operator licenses shall expire on December 31st following the date of issuance. The public operator license shall be valid only when the operator is acting as an employee of a government agency.

(3) The jurisdictional health officer or his or her duly authorized representative is exempt from this licensing provision when applying pesticides not restricted to use by certified applicators to control pests other than weeds. ((Public operator licenses shall expire on the fifth December 31 from the date of issuance. All public operator licenses valid on December 31, 1985, shall expire on December 31, 1990.

(2))) (4) Such agencies, municipal corporations and public utilities shall be subject to legal recourse by any person damaged by such application of any pesticide, and such action may be brought in the county where the damage or some part thereof occurred.

Sec. 54. Section 23, chapter 249, Laws of 1961 as last amended by section 8, chapter 36, Laws of 1988 and RCW 17.21.230 are each amended to read as follows:

There is hereby created a pesticide advisory board consisting of three licensed pesticide applicators residing in the state (one shall be licensed to operate ground apparatus, one shall be licensed to operate aerial apparatus, and one shall be licensed for structural pest control), one licensed pest control consultant, one licensed pesticide dealer manager, one entomologist in public service, one toxicologist in public service, one ((plant pathologist in public service)) pesticide coordinator from Washington State University, one member from the agricultural chemical industry, one member from the food processing industry, one member representing agricultural labor, one health care practitioner in private practice, one member from the environmental community, and two producers of agricultural crops or

products on which pesticides are applied or which may be affected by the application of pesticides. Such members shall be appointed by the governor for terms of four years and may be appointed for successive four year terms at the discretion of the governor. The governor may remove any member of the pesticide advisory board prior to the expiration of his or her term of appointment for cause. The pesticide advisory board shall also include the following nonvoting members: The director of the department of labor and industries or ((his)) a duly authorized representative, the environmental health specialist from the division of health of the department of social and health services, the supervisor of the ((grain and)) chemical division of the department, and the directors, or their appointed representatives, of the departments of wildlife, fisheries, natural resources, and ecology.

Sec. 55. Section 24, chapter 249, Laws of 1961 and RCW 17.21.240 are each amended to read as follows:

Upon the death, resignation or removal for cause of any member of the pesticide advisory board, the governor shall fill such vacancy, within thirty days of its creation, for the remainder of its term in the manner herein prescribed for appointment to the board.

Sec. 56. Section 25, chapter 249, Laws of 1961 and RCW 17.21.250 are each amended to read as follows:

The pesticide advisory board shall advise the director on any or all problems relating to the use and application of pesticides in the state.

Sec. 57. Section 26, chapter 249, Laws of 1961 and RCW 17.21.260 are each amended to read as follows:

The pesticide advisory board shall elect one of its members chairman. The members of the board shall meet at such time and at such place as shall be specified by the call of the director, chairman or a majority of the board.

Sec. 58. Section 27, chapter 249, Laws of 1961 as amended by section 24, chapter 34, laws of 1975-'76 2nd ex. sess. and RCW

No person appointed to the pesticide advisory board shall receive a salary or other compensation as a member of the board: PROVIDED, That each member of the board shall receive travel expenses in accordance with RCW 43.03.050 and 43.03.060 as now existing or hereafter amended for each day spent in actual attendance at or traveling to and from meetings of the board or special assignments for the board.

Sec. 59. Section 28, chapter 249, Laws of 1961 as last amended by section 183, chapter 202, Laws of 1987 and RCW 17.21.280 are each amended to read as follows:

All moneys collected under the provisions of this chapter shall be paid to the director for use exclusively in the enforcement of this chapter((. All moneys held by the director for the enforcement of chapter 17.20 RCW shall be retained by the director for the enforcement of this chapter)): PROVIDED, That all fees, fines, forfeitures and penalties collected or assessed by a district court because of the violation of a state law shall be remitted as provided in chapter 3.62 RCW as now exists or is later amended.

Sec. 60. Section 29, chapter 249, Laws of 1961 as amended by section 15, chapter 177, Laws of 1967 and RCW 17.21.290 are each amended to read as follows:

All licensed apparatuses shall be identified by a license plate furnished by the director, at no cost to the licensee, which plate shall be affixed in a location and manner upon such apparatus as prescribed by the director. ((The licensee shall also place on two sides of each licensed apparatus so as to be readily visible to the public, letters not less than one inch high stating the classification or classifications for which such licensee is licensed.))

Sec. 61. Section 3, chapter 158, Laws of 1985 and RCW 17.21.315 are each amended to read as follows:

Every person who fails to comply with this chapter or the rules adopted under it may be subjected to a civil penalty, as determined by the director, in an amount of not more than ((one)) seven thousand [illegible] such violation. Each and every such

violation shall be a separate and distinct offense. Every person who, through an act of commission or omission, procures, aids, or abets in the violation shall be considered to have violated this section and may be subject to the civil penalty herein provided.

Sec. 62. Section 10, chapter 191, Laws of 1971 ex. sess. and RCW 17.21.320 are each amended to read as follows:

(1) For purpose of carrying out the provisions of this chapter the director may enter upon any public or private premises at reasonable times, in order:

(a) To have access for the purpose of inspecting any equipment subject to this chapter and such premises on which such equipment is kept or stored;

(b) To inspect lands actually or reported to be exposed to pesticides;

(c) To inspect storage or disposal areas;

(d) To inspect or investigate complaints of injury to humans or land; or

(e) To sample pesticides being applied or to be applied.

(2) Should the director be denied access to any land where such access was sought for the purposes set forth in this chapter, ((he)) the director may apply to any court of competent jurisdiction for a search warrant authorizing access to such land for said purposes. The court may upon such application, issue the search warrant for the purposes requested.

(3) It shall be the duty of each prosecuting attorney to whom any violation of this chapter is reported, to cause appropriate proceedings to be instituted and prosecuted in a court of competent jurisdiction without delay.

(4) The director may bring an action to enjoin the violation or threatened violation of any provision of this chapter or any rule made pursuant to this chapter in the superior court of the county in which such violation occurs or is about to occur.

NEW SECTION. Sec. 63. A new section is added to chapter 17.21 RCW to read as follows:

(1) A person aggrieved by a violation of this chapter or the

rules adopted under this chapter:

(a) May request an inspection of the area in which the violation is believed to have occurred. If there are reasonable grounds to believe that a violation has occurred, the department shall conduct an inspection as soon as practicable. However, the director may refuse to act on a request for inspection concerning only property loss or damage if the person suffering property damage fails to file a timely report of loss under RCW 17.21.190. If an inspection is conducted, the person requesting the inspection shall:

(i) Be promptly notified in writing of the department's decision concerning the assessment of any penalty pursuant to the inspection; and

(ii) Be entitled, on request, to have his or her name protected from disclosure in any communication with persons outside the department and in any record published, released, or made available pursuant to this chapter: PROVIDED, That in any appeal proceeding the identity of the aggrieved person who requests the inspection shall be disclosed to the alleged violator of the act upon request of the alleged violator;

(b) Shall be notified promptly, on written application to the director, of any penalty or other action taken by the department pursuant to an investigation of the violation under this chapter; and

(c) May request, within ten days from the service of a final order fixing a penalty for the violation, that the director reconsider the entire matter if it is alleged that the penalty is inappropriate. If the person is aggrieved by a decision of the director on reconsideration, the person may request an adjudicative proceeding under chapter 34.05 RCW. However, the procedures for a brief adjudicative proceeding may not be used unless agreed to by the person requesting the adjudicative proceeding. During the adjudicative proceeding under (c) of this subsection, the presiding officer shall consider the interests of the person requesting the adjudicative proceeding.

(2) Nothing in this chapter shall preclude any person aggrieved by a violation of this chapter from bringing suit in a court of competent jurisdiction for damages arising from the violation.

NEW SECTION. Sec. 64. A new section is added to chapter 17.21 RCW to read as follows:

By December 1, 1989, and each subsequent December 1, the department shall report to the appropriate committees of the house of representatives and the senate on the activities of the department under this chapter. The report shall include, at a minimum: (1) A review of the department's pesticide incident investigation and enforcement activities, with the number of cases investigated and the number and amount of civil penalties assessed; and (2) a summary of the pesticide residue food monitoring program with information on the food samples tested and results of the tests, a listing of the pesticides for which no testing is done, and other pertinent information.

Sec. 65. Section 32, chapter 249, Laws of 1961 and RCW 17.21.910 are each amended to read as follows:

Unless revoked for cause by the director, any license issued under the provisions of this chapter ((17.20 RCW)) and in effect on ((the effective date of this act)) June 7, 1961, shall continue in full force and effect until its expiration date ((as if it had been issued under the requirements of RCW 17.21.090 and satisfied all requirements for obtaining such license, unless revoked prior thereto for cause by the director subsequent to a hearing.

The director shall prorate the cost of any license provided for in this chapter for the license period beginning with the ((effective date of this act and ending December 31, 1961)): PROVIDED, That public operator, private commercial applicator and demonstration and research applicator licenses in effect on December 31, 1985, shall expire on December 31, 1990, and any public operator, private commercial applicator and demonstration and research applicator licenses issued after December 31, 1985, and in effect on December 31, 1986, shall expire on December 31, 1991.

NEW SECTION. Sec. 66. A new section is added to chapter 17.21 RCW to read as follows:

Each registration and licensing fee under this chapter is

agriculture—local fund, provided that an additional one-time surcharge of five dollars shall be collected on January 1, 1990. The revenue raised by the imposition of this surcharge shall be used to assist in funding the pesticide incident reporting and tracking review panel, department of social and health services' pesticide investigations, and the department of agriculture's pesticide investigations.

NEW SECTION. Sec. 67. A new section is added to chapter 70.104 RCW to read as follows:

The legislature finds that heightened concern regarding health and environmental impacts from pesticide use and misuse has resulted in an increased demand for full-scale health investigations, assessment of resource damages, and health effects information. Increased reporting, comprehensive unbiased investigation capability, and enhanced community education efforts are required to maintain this state's responsibilities to provide for public health and safety.

It is the intent of the legislature that the various state agencies responsible for pesticide regulation coordinate their activities in a timely manner to ensure adequate monitoring of pesticide use and protection of workers and the public from the effects of pesticide misuse.

NEW SECTION. Sec. 68. A new section is added to chapter 70.104 RCW to read as follows:

(1) There is hereby created a pesticide incident reporting and tracking review panel consisting of the following members:

(a) The directors, secretaries, or designees of the departments of labor and industries, agriculture, natural resources, wildlife, and ecology;

(b) The director of the department of social and health services or his or her designee, who shall serve as the coordinating agency for the review panel;

(c) The chair of the department of environmental health of the University of Washington, or his or her designee;

(d) The pesticide coordinator and specialist of the cooperative

extension at Washington State University or his or her designee;

(e) A representative of the Washington poison control center network;

(f) A practicing toxicologist and a member of the general public, who shall each be appointed by the governor for terms of two years and may be appointed for a maximum of four terms at the discretion of the governor. The governor may remove either member prior to the expiration of his or her term of appointment for cause. Upon the death, resignation, or removal for cause of a member of the review panel, the governor shall fill such vacancy, within thirty days of its creation, for the remainder of the term in the manner herein prescribed for appointment to the review panel.

(2) The review panel shall be chaired by the secretary of the department of social and health services, or designee. The members of the review panel shall meet at least monthly at a time and place specified by the chair, or at the call of a majority of the review panel.

320X NEW SECTION. Sec. 69. A new section is added to chapter 70.104 RCW to read as follows:

The responsibilities of the review panel shall include, but not be limited to:

(1) Establishing guidelines for centralizing the receipt of information relating to actual or alleged health and environmental incidents involving pesticides;

(2) Reviewing and making recommendations for procedures for investigation of pesticide incidents, which shall be implemented by the appropriate agency unless a written statement providing the reasons for not adopting the recommendations is provided to the review panel;

(3) Monitoring the time periods required for response to reports of pesticide incidents by the departments of agriculture, social and health services, and labor and industries;

(4) At the request of the chair or any panel member, reviewing pesticide incidents of unusual complexity or those that cannot be resolved;

(5) Identifying inadequacies in state and/or federal law that result in insufficient protection of public health and safety, with specific attention to advising the appropriate agencies on the adequacy of pesticide reentry intervals established by the federal environmental protection agency and registered pesticide labels to protect the health and safety of farmworkers. The panel shall establish a priority list for reviewing reentry intervals, which considers the following criteria:

(a) Whether the pesticide is being widely used in labor-intensive agriculture in Washington;

(b) Whether another state has established a reentry interval for the pesticide that is longer than the existing federal reentry interval;

(c) The toxicity category of the pesticide under federal law;

(d) Whether the pesticide has been identified by a federal or state agency or through a scientific review as presenting a risk of cancer, birth defects, genetic damage, neurological effects, blood disorders, sterility, menstrual dysfunction, organ damage, or other chronic or subchronic effects; and

(e) Whether reports or complaints of ill effects from the pesticide have been filed following worker entry into fields to which the pesticide has been applied; and

(6) Reviewing and approving an annual report prepared by the department of social and health services to the governor, agency heads, and members of the legislature, with the same available to the public. The report shall include, at a minimum:

(a) A summary of the year's activities;

(b) A synopsis of the cases reviewed;

(c) A separate descriptive listing of each case in which adverse health or environmental effects due to pesticides were found to occur;

(d) A tabulation of the data from each case;

(e) An assessment of the effects of pesticide exposure in the workplace;

(f) The identification of trends, issues, and needs; and

(g) Any recommendations for improved pesticide use practices.

NEW SECTION. Sec. 70. A new section is added to chapter 70.104

RCW to read as follows:

Nothing in sections 67 through 69 of this act shall be construed to affect in any manner the administration of Title 51 RCW by the department of labor and industries.

Sec. 71. Section 3, chapter 41, Laws of 1971 ex. sess. and RCW 70.104.030 are each amended to read as follows:

(1) The department of social and health services shall investigate all suspected human cases of pesticide poisoning and such cases of suspected pesticide poisoning of animals that may relate to human illness. The department shall establish time periods by rule to determine investigation response time. Time periods shall range from immediate to forty-eight hours to initiate an investigation, depending on the severity of the case or suspected case of pesticide poisoning.

In order to adequately investigate such cases, the department of social and health services shall have the power to:

(a) Take all necessary samples and human or animal tissue specimens for diagnostic purposes: PROVIDED, That tissue, if taken from a living human, shall be taken from a living human only with the consent of a person legally qualified to give such consent;

(b) Secure any and all such information as may be necessary to adequately determine the nature and causes of any case of pesticide poisoning.

(2) The state department of social and health services shall, by rule and regulation adopted pursuant to the Administrative Procedure Act, chapter ((34.04)) 34.05 RCW, as it now exists or is hereafter amended, and, in any event, with due notice and a hearing for the adoption of permanent rules, establish procedures for the prevention of any recurrence of poisoning and the department shall immediately notify the department of agriculture, the department of labor and industries, and other appropriate agencies of the results of its investigation for such action as the ((department-of--agriculture--or such)) other departments or agencies deem appropriate. The notification of such investigations and their results may include recommendations for further action by the appropriate department or

NEW SECTION. Sec. 72. A new section is added to chapter 70.104 RCW to read as follows:

(1) Any attending physician or other health care provider recognized as primarily responsible for the diagnosis and treatment of a patient or, in the absence of a primary health care provider, the health care provider initiating diagnostic testing or therapy for a patient shall report a case or suspected case of pesticide poisoning to the department of social and health services in the manner prescribed by, and within the reasonable time periods established by, rules of the state board of health. Time periods established by the board shall range from immediate reporting to reporting within seven days depending on the severity of the case or suspected case of pesticide poisoning. The reporting requirements shall be patterned after other board rules establishing requirements for reporting of diseases or conditions. Confidentiality requirements shall be the same as the confidentiality requirements established for other reportable diseases or conditions. The board rules shall determine what information shall be reported. Reports shall be made on forms provided to health care providers by the department of social and health services. For purposes of any oral reporting, the department of social and health services shall make available a toll-free telephone number.

(2) Within a reasonable time period as established by board rules, the department of social and health services shall investigate the report of a case or suspected case of pesticide poisoning to document the incident. The department shall report the results of the investigation to the health care provider submitting the original report.

(3) Cases or suspected cases of pesticide poisoning shall be reported by the department of social and health services to the pesticide reporting and tracking review panel within the time periods established by state board of health rules.

(4) Upon request of the primary health care provider, pesticide applicators or employers shall make available to that provider any available information on pesticide applications which may have affected the health of the provider's patient. This information is

to be used only for the purposes of providing health care services to the patient.

(5) Any failure of the primary health care provider to make the reports required under this section may be cause for the department of social and health services to submit information about such nonreporting to the applicable disciplining authority for the provider under RCW 18.130.040.

(6) No cause of action shall arise as the result of: (a) The failure to report under this section; or (b) any report submitted to the department of social and health services under this section.

(7) For the purposes of this section, a suspected case of pesticide poisoning is a case in which the diagnosis is thought more likely than not to be pesticide poisoning.

NEW SECTION. Sec. 73. A new section is added to chapter 70.104 RCW to read as follows:

The department of social and health services, after seeking advice from the state board of health, local health officers, and state and local medical associations, shall develop a program of medical education to alert physicians and other health care providers to the symptoms, diagnosis, treatment, and reporting of pesticide poisonings.

NEW SECTION. Sec. 74. The following acts or parts of acts are each repealed:

(1) Section 19, chapter 190, Laws of 1971 ex. sess., section 28, chapter 182, Laws of 1982 and RCW 15.58.190;

(2) Section 45, chapter 190, Laws of 1971 ex. sess. and RCW 15.58.930;

(3) Section 9, chapter 249, Laws of 1961, section 5, chapter 177, Laws of 1967, section 2, chapter 191, Laws of 1971 ex. sess., section 7, chapter 203, Laws of 1986, section 27, chapter 45, Laws of 1987 and RCW 17.21.090;

(4) Section 12, chapter 249, Laws of 1961, section 7, chapter 177, Laws of 1967, section 8, chapter 203, Laws of 1986, section 29, chapter 45, Laws of 1987 and RCW 17.21.120; and

(5) Section 7, chapter 92, Laws of 1979 and RCW 17.21.124.

NEW SECTION. Sec. 75. Section 18, chapter 177, Laws of 1967, section 6, chapter 191, Laws of 1971 ex. sess., section 5, chapter 92, Laws of 1979 and RCW 17.21.205 are each repealed effective January 1, 1990.

NEW SECTION. Sec. 76. A new section is added to chapter 49.70 RCW to read as follows:

(1) If a pesticide having a reentry interval of greater than twenty-four hours is applied to a labor-intensive agricultural crop, the pesticide-treated area shall be posted with warning signs in accordance with the requirements of this section.

(2) When pesticide warning signs are required under this section, the employer shall post signs visible from all usual points of entry to the pesticide-treated area. If there are no usual points of entry or the area is adjacent to an unfenced public right of way, signs shall be posted (a) at each corner of the pesticide-treated area, and (b) at intervals not exceeding six hundred feet, or (c) at other locations approved by the department that provide maximum visibility.

(3) The signs shall be posted no sooner than twenty-four hours before the scheduled application of the pesticide, remain posted during application and throughout the applicable reentry interval, and be removed within two days after the expiration of the applicable reentry interval and before employee reentry is permitted.

(4) Signs shall be legible for the duration of use. Signs shall contain a prominent symbol approved by the department of agriculture and the department of labor and industries by rule, and wording shall be in English and Spanish or other languages as required by the department. Signs shall meet the minimum specifications of rules adopted by the department, which rules shall include, at a minimum, size and lettering requirements.

NEW SECTION. Sec. 77. A new section is added to chapter 49.70 RCW to read as follows:

(1) An employer who applies or stores pesticides in connection with the production of an agricultural crop shall compile and maintain a workplace pesticide list by crop for each pesticide that

is applied to a crop or stored in a work area. The workplace pesticide list shall be kept on a form prescribed by the department and shall contain at least the following information:

(a) The location of the land where the pesticide was applied or site where the pesticide was stored;

(b) The year, month, day, and time the pesticide was applied;

(c) The product name used on the registered label and the United States environmental protection agency registration number, if applicable, of the pesticide that was applied or stored;

(d) The crop or site to which the pesticide was applied;

(e) The amount of pesticide applied per acre, or other appropriate measure;

(f) The concentration of pesticide that was applied;

(g) The number of acres, or other appropriate measure, to which pesticide was applied;

(h) If applicable, the licensed applicator's name, address, and telephone number and the name of the individual or individuals making the application; and

(i) The direction and estimated velocity of the wind at the time the pesticide was applied: PROVIDED, That this subsection (i) shall not apply to applications of baits in bait stations and pesticide applications within structures.

(2) The employer shall update the workplace pesticide list on the same day that a pesticide is applied or is first stored in a work area.

(3) The workplace pesticide list may be prepared for the workplace as a whole or for each work area and must be readily available to employees and their designated representatives. New or newly assigned employees shall be made aware of the pesticide chemical list before working with pesticides or in a work area containing pesticides.

(4) An employer subject to this section shall maintain one form for each crop, work area, or workplace as a whole, as appropriate, and shall add information to the form as different pesticides are applied or stored. The forms shall be accessible and available for

physical integrity. The employer shall maintain and preserve the forms required under this section for no less than seven years. The records shall include an estimation of the total amount of each pesticide listed on the forms.

(5) After the effective date of this section, if an employer has failed to maintain and preserve the forms as required, the employer shall be subject to any applicable penalties authorized under this chapter or chapter 49.17 RCW.

(6) If activities for which forms are maintained cease at a workplace, the forms shall be filed with the department. If an employer subject to this section is succeeded or replaced in that function by another person, the person who succeeds or replaces the employer shall retain the forms as required by this section but is not liable for violations committed by the former employer under this chapter or rules adopted under this chapter, including violations relating to the retention and preservation of forms.

(7) The employer shall provide copies of the forms, on request, to an employee or the employee's designated representative in the case of an industrial insurance claim filed under Title 51 RCW with the department of labor and industries, treating medical personnel, the pesticide incident reporting and tracking review panel, or department representative. The designated representative or treating medical personnel are not required to identify the employee represented or treated. The department shall keep the name of any affected employee confidential in accordance with RCW 49.17.080(1). If an employee, a designated representative, treating medical personnel, or the pesticide incident reporting and tracking review panel requests a copy of a form and the employer refuses to provide a copy, the requester shall notify the department of the request and the employer's refusal. Within seven working days, the department shall request that the employer provide the department with all pertinent copies, except that in a medical emergency the request shall be made within two working days. The employer shall provide copies of the form to the department within twenty-four hours after the department's request.

... labor and industries and the department of

agriculture shall jointly adopt, by rule, one form that satisfies the information requirements of this section and RCW 17.21.100. Records kept by the employer on the prescribed form under RCW 17.21.100 may be used to comply with the workplace pesticide list information requirements under this section.

Sec. 78. Section 16, chapter 35, Laws of 1945 as last amended by section 2, chapter 292, Laws of 1977 ex. sess. and RCW 50.04.150 are each amended to read as follows:

Except as otherwise provided in RCW 50.04.155, the term "employment" shall not include service performed in agricultural labor ((except as otherwise provided in RCW 50.04.155)) by individuals who are enrolled as students and regularly attending classes, or are between two successive academic years or terms, at an elementary school, a secondary school, or an institution of higher education as defined in RCW 50.44.037 and in the case of corporate farms not covered under RCW 50.04.155, the provisions regarding family employment in RCW 50.04.180 shall apply.

Agricultural labor is defined as services performed:

(1) On a farm, in the employ of any person, in connection with the cultivation of the soil, or in connection with raising or harvesting any agricultural or horticultural commodity, including raising, shearing, feeding, caring for, training, and management of livestock, bees, poultry, and furbearing animals and wild life, or in the employ of the owner or tenant or other operator of a farm in connection with the operation, management, conservation, improvement, or maintenance of such farm and its tools and equipment; or

(2) In packing, packaging, grading, storing, or delivering to storage, or to market or to a carrier for transportation to market, any agricultural or horticultural commodity; but only if such service is performed as an incident to ordinary farming operations. The exclusions from the term "employment" provided in this paragraph shall not be deemed to be applicable with respect to commercial packing houses, commercial storage establishments, commercial canning, commercial freezing, or any other commercial processing or with respect to services performed in connection with the cultivation, raising, harvesting and processing of oysters or raising and harvesting of mushrooms or in connection with any agricultural or horticultural commodity after its delivery to a terminal market for distribution for consumption.

Sec. 79. Section 5, chapter 205, Laws of 1984 as last amended by section 3, chapter 171, Laws of 1987 and RCW 50.29.025 are each amended to read as follows:

The contribution rate for each employer shall be determined under this section.

(1) A fund balance ratio shall be determined by dividing the balance in the unemployment compensation fund as of the June 30th immediately preceding the rate year by the total remuneration paid by all employers subject to contributions during the second calendar year preceding the rate year and reported to the department by the following March 31st. The division shall be carried to the fourth decimal place with the remaining fraction, if any, disregarded. The fund balance ratio shall be expressed as a percentage.

(2) The interval of the fund balance ratio, expressed as a percentage, shall determine which tax schedule in subsection (5) of this section shall be in effect for assigning tax rates for the rate year. The intervals for determining the effective tax schedule shall be:

Interval of the Fund Balance Ratio Expressed as a Percentage	Effective Tax Schedule
3.40 and above	A
2.90 to 3.39	B
2.40 to 2.89	C
1.90 to 2.39	D
1.40 to 1.89	E
Less than 1.40	F

(3) An array shall be prepared, listing all qualified employers in ascending order of their benefit ratios. The array shall show for each qualified employer: (a) Identification number; (b) benefit ratio; (c) taxable payrolls for the four calendar quarters

immediately preceding the computation date and reported to the department by the cut-off date; (d) a cumulative total of taxable payrolls consisting of the employer's taxable payroll plus the taxable payrolls of all other employers preceding him or her in the array; and (e) the percentage equivalent of the cumulative total of taxable payrolls.

(4) Each employer in the array shall be assigned to one of twenty rate classes according to the percentage intervals of cumulative taxable payrolls set forth in subsection (5) of this section: PROVIDED, That if an employer's taxable payroll falls within two or more rate classes, the employer and any other employer with the same benefit ratio shall be assigned to the lowest rate class which includes any portion of the employer's taxable payroll.

(5) The contribution rate for each employer in the array shall be the rate specified in the following table for the rate class to which he or she has been assigned, as determined under subsection (4) of this section, within the tax schedule which is to be in effect during the rate year:

Schedule of Contribution Rates for Effective Tax Schedule

Percent of Cumulative Taxable Payrolls		Rate Class	A	B	C	D	E	F
From	To							
0.00	5.00	1	0.48	0.58	0.98	1.48	1.88	2.48
5.01	10.00	2	0.48	0.78	1.18	1.68	2.08	2.68
10.01	15.00	3	0.58	0.98	1.38	1.78	2.28	2.88
15.01	20.00	4	0.78	1.18	1.58	1.98	2.48	3.08
20.01	25.00	5	0.98	1.38	1.78	2.18	2.68	3.18
25.01	30.00	6	1.18	1.58	1.98	2.38	2.78	3.28
30.01	35.00	7	1.38	1.78	2.18	2.58	2.98	3.38
35.01	40.00	8	1.58	1.98	2.38	2.78	3.18	3.58
40.01	45.00	9	1.78	2.18	2.58	2.98	3.38	3.78
45.01	50.00	10	1.98	2.38	2.78	3.18	3.58	3.98
50.01	55.00	11	2.28	2.58	2.98	3.38	3.78	4.08
55.01	60.00	12	2.48	2.78	3.18	3.58	3.98	4.28
60.01	65.00	13	2.68	2.98	3.38	3.78	4.18	4.48
65.01	70.00	14	2.88	3.18	3.58	3.98	4.38	4.68
70.01	75.00	15	3.08	3.38	3.78	4.18	4.58	4.78
75.01	80.00	16	3.28	3.58	3.98	4.38	4.68	4.88
80.01	85.00	17	3.48	3.78	4.18	4.58	4.88	4.98
85.01	90.00	18	3.88	4.18	4.58	4.88	4.98	5.18
90.01	95.00	19	4.28	4.58	4.98	5.08	5.18	5.38
95.01	100.00	20	5.40	5.40	5.40	5.40	5.40	5.40

(6) The contribution rate for each employer not qualified to be in the array shall be ((a-rate-equal-to-the-average-industry-tax-rate as--determined-by-the-commissioner;-however,-the-rate-may-not-be-less than-one-percent--PROVIDED,-That)) as follows:

(a) Employers who do not meet the definition of "qualified employer" by reason of failure to pay contributions when due shall be assigned the contribution rate of five and four-tenths percent;

(b) The contribution rate for employers exempt as of December 31, 1989, who are newly covered under the section 78, chapter ..., Laws of 1989, (section 78 of this act) amendment to RCW 50.04.150 and not yet qualified to be in the array shall be 2.5 percent for employers whose standard industrial code is "016", "017", "018", "021", or "081"; and

(c) For all other employers not qualified to be in the array, the contribution rate shall be a rate equal to the average industry rate as determined by the commissioner; however, the rate may not be less than one percent. Assignment of employers by the commissioner to industrial classification, for purposes of this subsection, shall be in accordance with established classification practices found in the "Standard Industrial Classification Manual" issued by the federal office of management and budget to the third digit provided in the Standard Industrial Classification code.

Sec. 80. Section 78, chapter 35, Laws of 1945 as last amended by section 6, chapter 33, Laws of 1977 ex. sess. and RCW 50.20.100 are each amended to read as follows:

Suitable work for an individual is employment in an occupation in keeping with the individual's prior work experience, education, or

training and if the individual has no prior work experience, special education, or training for employment available in the general area, then employment which the individual would have the physical and mental ability to perform, and for individuals with base year work experience in agricultural labor, any agricultural labor available from any employer shall be deemed suitable unless it meets the conditions in RCW 50.20.110 or the commissioner finds elements of specific work opportunity unsuitable for a particular individual. In determining whether work is suitable for an individual, the commissioner shall also consider the degree of risk involved to the individual's health, safety, and morals, the individual's physical fitness, the individual's length of unemployment and prospects for securing local work in the individual's customary occupation, the distance of the available work from the individual's residence, and such other factors as the commissioner may deem pertinent, including state and national emergencies.

Sec. 81. Section 6, chapter 205, Laws of 1984 and RCW 50.29.062 are each amended to read as follows:

Predecessor and successor employer contribution rates shall be computed in the following manner:

(1) If the successor is an employer at the time of the transfer, his or her contribution rate shall remain unchanged for the remainder of the rate year in which the transfer occurs. From and after January 1 following the transfer, the successor's contribution rate for each rate year shall be based on his or her experience with payrolls and benefits including the experience of the acquired business or portion of a business from the date of transfer, as of the regular computation date for that rate year.

(2) If the successor is not an employer at the time of the transfer, he or she shall pay contributions at the rate class assigned to the predecessor employer at the time of the transfer for the remainder for that rate year and continuing until such time as he or she qualifies for a different rate in his or her own right.

(3) If the successor is not an employer at the time of the transfer and simultaneously acquires the business or a portion of the business of two or more employers in different rate classes, his or her rate from the date the transfer occurred until the end of that rate year and until he or she qualifies in his or her own right for a new rate, shall be the highest rate class applicable at the time of the acquisition to any predecessor employer who is a party to the acquisition.

(4) The contribution rate on any payroll retained by a predecessor employer shall remain unchanged for the remainder of the rate year in which the transfer occurs.

(5) In all cases, from and after January 1 following the transfer, the predecessor's contribution rate for each rate year shall be based on his or her experience with payrolls and benefits as of the regular computation date for that rate year including the experience of the acquired business or portion of business up to the date of transfer: PROVIDED, That if all of the predecessor's business is transferred to a successor or successors, the predecessor shall not be a qualified employer until he or she satisfies the requirements of a "qualified employer" as set forth in RCW 50.29.010.

NEW SECTION. Sec. 82. (1) It is the intent of the legislature that the department assist agricultural employers in mitigating the costs of the state's unemployment insurance program. The department shall work with members of the agricultural community to: Improve understanding of the program's operation; increase compliance with work-search requirements; provide prompt notification of potential claims against an employer's experience rating; inform employers of their rights; inform employers of the actions necessary to appeal a claim and to protect their rights; and reduce claimant and employer fraud. These efforts shall include:

(a) Conducting employer workshops and community seminars;

(b) Developing new educational materials; and

(c) Developing forms that use lay language.

(2) The employment security department, the department of labor and industries, the department of licensing, and the department of revenue shall develop a plan to implement voluntary combined reporting for agricultural employers by January 1, 1991. The departments shall submit the plan to the legislature by January 10, 1990, and include recommendations for legislation necessary to

standardize and simplify statutory coverage and other requirements. Such standardization shall be as consistent with federal requirements as possible.

The departments shall consult with representatives of agricultural employer and labor associations and general business associations in the development of the plan and legislation. The departments shall ensure that they accommodate the needs of small agricultural employers in particular.

(3) The department shall report to the appropriate standing committees of the legislature by January 10, 1990, 1991, and 1992 and include a description of the activities of the department to carry out the intents of this section and provide quantitative data where possible on the effectiveness of the activities undertaken by the department , comply with the intents of this section during the previous calendar year.

NEW SECTION. Sec. 83. Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) "Agricultural employment" or "employment" means employment in agricultural labor as defined in RCW 50.04.150.

(2) "Department" means the department of labor and industries.

(3) "Employer" means any person, firm, corporation, partnership, business trust, legal representative, or other business entity that engages in any agricultural activity in this state and employs one or more employees.

(4) "Employee" means a person employed in agricultural employment, and includes a person who is working under an independent contract the essence of which is personal labor in agricultural employment whether by way of manual labor or otherwise. However, "employee" shall not include immediate family members of the officers of any corporation, partnership, sole proprietorship, or other business entity, or officers of any closely held corporation engaged in agricultural production of crops or livestock.

(5) "Minor" means an employee who is under the age of eighteen years.

NEW SECTION. Sec. 84. (1) Each employer required to keep employment records under RCW 49.46.070, shall retain such records for three years.

(2) Each employer shall furnish to each employee at the time the employee's wages are paid an itemized statement showing the pay basis in hours or days worked, the rate or rates of pay, the gross pay, and all deductions from the pay for the respective pay period.

NEW SECTION. Sec. 85. The department shall establish an advisory committee on agricultural labor to develop recommendations for rules to provide labor standards for agricultural employment of minors. The advisory committee shall be composed of: A representative of the department of labor and industries; a representative of the department of agriculture; representatives of the agricultural employer and employee communities; and one legislator from each caucus of the house of representatives and the senate, to be appointed by the speaker of the house of representatives and president of the senate, respectively.

Based upon the recommendations of the advisory committee and considerations as to the nature of agricultural employment and usual crop cultural and harvest requirements, the director shall adopt rules under chapter 34.05 RCW which only address the following:

(1) The employment of minors, providing for annual notification to the department of intent to hire minors, and including provisions that both encourage school attendance and provide flexible hours that will meet the requirements of agricultural employment; and

(2) The provision of rest and meal periods for agricultural employees, taking into account naturally occurring work breaks where possible. The initial rules shall be adopted no later than July 1, 1990.

NEW SECTION. Sec. 86. Any violation of the provisions of this chapter or rules adopted hereunder shall be a class I civil infraction. The director shall have the authority to issue and enforce civil infractions according to chapter 7.80 RCW.

NEW SECTION. Sec. 87. Sections 83 through 86 of this act shall

NEW SECTION. Sec. 88. If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

NEW SECTION. Sec. 89. If any part of this act is found to be in conflict with federal requirements which are a prescribed condition to the allocation of federal funds to the state or the eligibility of employers in this state for federal unemployment tax credits, the conflicting part of this act is hereby declared to be inoperative solely to the extent of the conflict, and such finding or determination shall not affect the operation of the remainder of this act. The rules under this act shall meet federal requirements which are a necessary condition to the receipt of federal funds by the state or the granting of federal unemployment tax credits to employers in this state.

NEW SECTION. Sec. 90. Sections 69 and 71 through 73 of this act shall take effect on January 1, 1990.

NEW SECTION. Sec. 91. Sections 78 through 81 of this act shall take effect on January 1, 1990.

NEW SECTION. Sec. 92. Section 76 of this act shall take effect on July 1, 1990.

Passed the House April 23, 1989.

Speaker of the House.

Passed the Senate April 23, 1989.

President of the Senate.

E V E R G R E E N L E G A L S E R V I C E S

M E M O R A N D U M

TO: FWD Staff, Shelley Davis and Ralph Lightstone

FROM: Dan Ford

DATE: May 9, 1989

RE: SUMMARY OF ENROLLED HOUSE BILL NO. 2222

EHB 2222 amends Washington statutes pertaining to pesticides, unemployment compensation, and industrial welfare. It is expected that the Governor will soon sign the bill into law. The following is a summary of the changes made by the bill:

I. Pesticide Provisions

A. Posting of Fields (§ 76)

The bill requires that fields treated with a pesticides having a reentry interval of greater than 24 hours be posted with warning signs in English and Spanish. If the proposed EPA reentry intervals are adopted, Washington law will require posting for all Toxicity I organophosphates and carbamates, which are to have a generic reentry interval of 48 hours. The proposed federal posting requirement would only apply to the handful of pesticides that are to have a reentry interval of greater than 48 hours.

B. Reentry Intervals (§ 69)

The bill creates a Pesticide Incident Reporting and Tracking (PIRT) review panel which is to identify inadequacies in federal and state law with specific attention to advising "appropriate agencies" on the adequacy of existing pesticide reentry intervals. The PIRT panel consists of representatives of various agencies with jurisdiction over pesticide-related matters (i.e., Department of Social and Health Services (DSHS), Department of Agriculture, Department of Labor and Industries, Department of Ecology, Department of Natural Resources, and Department of Wildlife). The PIRT also includes representatives of the University of Washington Environmental Health Department, the pesticide coordinator of the Washington State University Extension Program, and the Washington poison control network.

In evaluating existing reentry intervals, the PIRT panel is to establish a priority list for reviewing reentry intervals based on: (1) the extent of the use of the pesticide in Washington's labor-intensive agriculture, (2) whether another state has an interval long than the federal interval, (3) the toxicity category of the pesticide, (4) whether the pesticide has been identified as presenting a risk of chronic effects such as cancer or birth defects, and (5) whether there have been reports or complaints of ill effects from the pesticide following the worker reentry into fields.

Presumably, the PIRT recommendations will be directed toward the Department of Labor and Industries (L & I) and the Department of Agriculture. L & I has authority under RCW 49.17.050(4) to provide appropriate protection from "toxic materials" in the workplace. I understand that joint rulemaking is being contemplated by L & I and Agriculture.

The functions of the PIRT panel also include recommending pesticide investigation procedures to the various agencies, monitoring investigations by the agencies, and establishing guidelines for centralizing the receipt of information relating to pesticide incidents with health and environmental effects.

C. Recordkeeping (§ 77)

The bill requires that employers who apply or store pesticides must maintain for at least 7 years a "workplace pesticide list" for each pesticide that is applied or stored. The list must include the location where the pesticide is applied or stored, the date and time of application, the product name and EPA registration number of the pesticide, the crop for which the pesticide is used, the amount and concentration of the pesticide applied, the amount of area (acreage) to which the pesticide was applied, the name and address of the applicator, and the direction and velocity of the wind at the time of application.

The employers required to update their list on the same day that a pesticide is applied or stored. The list must be readily available to employees and their designated representatives.

D. Investigations of Human Health Incidents (§ 70)

The bill requires DSHS to establish time periods for the agency to initiate investigation of pesticide incidents involving human health. Depending on the severity of the incident, the periods range from immediate investigation to 48 hours.

E. Physician Reporting (§ 72)

The bill requires the health provider primarily responsible for diagnosis and treatment of the patient to report cases or suspected cases of pesticide poisoning to DSHS within time periods to be establish by rule. The periods will range from immediate reporting to 7 days depending on the severity of the incident. Pesticide applicators and employers must make information concerning the pesticide application available to the provider upon the provider's request.

F. Medical Education on Pesticides (§ 73)

DSHS is to develop a program of medical education to alert health providers to symptoms, diagnosis, treatment, and reporting of pesticide poisonings.

G. Enforcement

The Department of Labor and Industries is responsible for enforcing the posting and recordkeeping provisions, which were enacted as amendments to the Worker and Community Right to Know Act (Chapter 49.70 RCW). DSHS is in charge of physician reporting and pesticide investigations related to human health. DSHS also chairs the PIRT panel.

The bill gives greater procedural rights to persons aggrieved by violations of Chapter 17.21 RCW, the Washington Pesticide Application Act, which is enforced by the Department of Agriculture. Previously, only the persons who were alleged to have violated the act were given the right to notice and appeal. Under EHB 2222, persons aggrieved by violations of the act have the right to notice and appeal as well as the right to make confidential complaints. (See, § 63).

H. Effective Dates (§§ 90-92)

The posting provisions of the bill take effect on July 1, 1990, while the physician reporting, medical education and PIRT provisions are effective on January 1, 1990. The other provisions take effect 90 days after the end of the session in which they were enacted.

II. Unemployment Compensation

§ 78 eliminates the "small farmer exception" except with respect to student employees of "small farmers." The Washington "small farmer exception" has been the same that existed in other states pursuant to the FUTA.

In exchange for the virtual elimination of the "small farmer" exception, the agriculture industry obtained a special "suitable work" provision for agricultural workers. Under § 80, any agricultural labor is deemed suitable work for individuals with base year employment in agriculture unless: (1) the position is being offered due to a labor dispute, (2) the worker will be required to join or prohibited from joining a labor organization as a condition of employment, (3) the conditions of the employment are substantially worse than prevailing conditions, or (4) the department finds that elements of the particular work are unsuitable for the worker.

The unemployment compensation provisions are effective on January 1, 1990.

III. Industrial Welfare

§ 84 of the bill requires all agriculture employers to furnish AWPA-type statements of wages and deductions (i.e., pay stubs) at the time wages are paid. This section also requires retention of AWPA-type employment records for three years.

§ 85 establishes an advisory committee and rulemaking (by Labor & Industries) to provide labor standards for employment of minors in agriculture, including provisions that "both encourage school attendance and provide flexible hours that will meet the requirements of agricultural employment." The rulemaking is to also provide for rest and meal breaks for agricultural workers. Rules are to be adopted no later than July 1, 1990.

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po box 8517
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maricopa county organizing project

July 27, 1989

Gustavo Gutierrez
Community Legal Services
Farmworker Program
Community Education Director
9306 W. Van Buren
Tolleson, Az. 85353

Dear Gustavo:

I'm enclosing for your information copies of the Pesticide Worker Safety Rules of the Arizona Administrative Code Rules R4-13-701 through R4-13-708 as filed with the Office of the Secretary of State, State of Arizona on July 13, 1989.

The interim rules (e.g., the previous rules of the Board of Pesticide Control) that were being enforced under the provisions of the Arizona Environmental Quality Act of 1986 are no longer in effect.

I'm interested in setting a meeting to discuss ideas and brainstorm on a plan for production of educational materials on pesticides.

Sin mas, espero tu llamado para juntarnos.

Fraternalmente,

Francisca Cavazos
MCOP

xc: Laurie Martinelli
Valerie Wilks, FJF

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New Jersey State Library

THE INDUSTRIAL COMMISSION OF ARIZONA

Pesticide Worker Safety Rules

July 13, 1989

ARTICLE 7. PESTICIDE WORKER SAFETY

R4-13-701. Definitions

R4-13-702. Training requirements; recordkeeping

R4-13-703. Medical monitoring and medical care

R4-13-704. Notification and posting

R4-13-705. Reentry intervals

R4-13-706. Decontamination and washing facilities

R4-13-707. Personal protective measures

R4-13-708. Employees working alone; conditions

ARTICLE 7. PESTICIDE WORKER SAFETY

R4-13-701. Definitions

In this article, unless the context otherwise requires:

1. "Applicator" means any person who applies, or causes to have applied, any pesticide whether for personal use or on the property of other persons.

2. "Carbamate pesticides" means esters of N-methyl carbamic acid which inhibit cholinesterase.

3. "Certified applicator" is defined by A.A.C. R3-10-101.12.

4. "Chemical-resistant" means a material which allows no measurable movement of pesticide through the material during use.

5. "Closed system" means any method that eliminates open atmospheric contact with a pesticide or its rinse solution, if any, during transfer from the original container to the application equipment or system.

6. "Director" means the director of the Division of Occupational Safety and Health of the Industrial Commission of Arizona.

7. "Disposal" means the discarding of a pesticide container which results in the deposit, dumping, burning, or placing of the container into or on any land or water.

8. "Handle" means any activity involving contact with pesticides as a result of:

a. Mixing, loading, transferring or applying pesticides;

b. Working as a flagger for an aerial pesticide-application crew;

c. Disposal of pesticide containers; or

d. Working with contaminated equipment.

This definition does not apply to employees who transport pesticides

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unopened containers.

9. 'Organophosphorous pesticides' means cholinesterase inhibiti compounds containing the elements of carbon and phosphorous.

10. 'Pesticide' means any substance or mixture of substances as defined A.R.S. §3-361.6.

11. 'Reentry interval' means the period of time after a pestici application during which entry into the treated area is restricted, includ at a minimum the time required for sprays to dry, dusts to settle and vap to disperse.

12. 'Restricted-use pesticide' is defined by A.A.C. R3-10-101.45.

13. 'Toxicity Category I,' 'Toxicity Category II,' 'Toxicity Category II and 'Toxicity Category IV' are defined by 40 CFR 156.10(h)(1), as set forth 40 CFR Parts 150 to 189, revised as of July 1, 1988, pages 81 and 82, which incorporated herein by reference and on file, and available for review, the Office of the Secretary of State.

R4-13-702. Training requirements; recordkeeping

A. An employer shall provide training so that each employee who ha any pesticide understands all of the following:

1. The hazards involved.

2. Safety procedures to be followed.

3. Clothing and protective equipment to be used.

4. The necessity of washing hands and face before eating, drinking, the toilet, or using tobacco.

5. Where to obtain emergency medical treatment.

6. The purposes and requirements of medical supervision inc emergency care, medical care, surveillance and testing when required.

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7. The manner in which pesticides can enter the body, and the common symptoms of pesticide poisoning.

8. Proper methods of storage and disposal of pesticides and pesticide containers.

B. An employer shall provide training (required by subsection A) before the employee is allowed to mix, load, apply or supervise the application of pesticides and at least annually thereafter. Training may be waived by the Industrial Commission if the employee is a certified applicator or submits written documentation to his employer that training was received within the last year.

C. An employer shall record the date and number of hours of instruction and retain an outline of the content of the initial and annually required training given to the employee. This record shall be signed by both the employee and the employer and retained by the employer for two years at the employer's office. This record shall be available for review by the Director or his authorized agent.

D. Instruction shall be given so that it is clearly understood by each person being trained.

R4-13-703. Medical monitoring and medical care

A. For all activities involving the use of pesticides, the employer shall make prior arrangements for emergency medical care and shall post in a prominent place at the worksite the name, address and telephone number of a physician, clinic or hospital emergency room providing such emergency medical care.

B. If the employer has reasonable cause to believe that an employee has a pesticide illness or has been exposed to a pesticide that can reasonably

expected to lead to an employee's illness, the employer shall ensure that employee is immediately transported for emergency medical care.

C. The employer shall provide pre-exposure baseline cholinesterase te for pilots, mixer/loaders and any other employees who are expected to han any pesticide product with the signal word "DANGER" or "WARNING" on the la and which contain organophosphorous pesticides in other than their origi sealed containers for 30 hours or more in a 30-day period.

R4-13-704. Notification and posting

A. The employer shall orally warn employees who work in the fi regarding areas being treated or which have been treated with a pesticide which the reentry interval has not expired. The oral warning shall be so that it is clearly understood by each employee. The oral warning include:

1. The specific locations and descriptions of the pesticide-treated or areas to be treated.

2. The period of the work day during which workers may not enter wi direction.

B. The person having controlling authority for the operation of a f his designee shall orally provide information to any farm labor cont performing work on that farm which advises that farm labor contractor areas being treated or which have been treated with a pesticide for whi reentry interval has not expired. The orally provided information include:

1. The specific location and description of the pesticide-treated or areas to be treated; and

2. The period of the workday during which workers are not permi

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enter treated areas.

C. The person having controlling authority for the operation of a farm o his designee shall post warning signs at the usual points of worker entry t the treated field when any pesticide having a reentry interval of 48 hours o greater is applied to broccoli, cauliflower, celery, flowers, grapes, lettuce nectarines, ornamentals, peaches, plums, or strawberries.

D. Whenever warning signs are required, the warning signs shall be poste before scheduled application and shall be removed within 72 hours afte expiration of the reentry interval.

E. The warning signs shall contain the words "DANGER" and "PESTICIDES" a the top and "KEEP OUT" at the bottom in a language understood by ea employee. Near the center of the sign shall be a circle containing upraised hand on the left and a stern human face on the right. Letters f all the words shall be red and at least 2 1/2 inches high and clear legible. The background outside the circle shall be white. The hand and large portion of the face shall be white. The length of the hand shall be least twice the height of the letters and the length of the face shall be or slightly smaller than the hand. The remainder of the inside of the cir shall be red.

R4-13-705. Reentry intervals

A. Where a product specific reentry interval has been established by United States Environmental Protection Agency for a pesticide product (u the provision of 40 CFR Part 170, revised July 1, 1988, pages 161 thru which is incorporated herein by reference and on file with the Office of Secretary of State), that product specific reentry interval shall apply.

B. Where no product specific reentry interval has been established by

United States Environmental Protection Agency for a pesticide product, reentry interval shall be as follows:

1. If the pesticide product contains a sole active ingredient which is Toxicity Category I and which is an organophosphorous or carbamate pestici the reentry interval shall be 48 hours.

2. If the pesticide product contains any other sole active ingredi which is in Toxicity Category I, the reentry interval shall be 24 hours.

3. If the pesticide product contains a sole active ingredient which is Toxicity Category II and which is an organophosphorous or carbamate pestici the reentry interval shall be 24 hours.

4. If the pesticide product contains any other sole active ingredi which is in Toxicity Category II, the reentry interval shall be the necessary for sprays to dry, dusts to settle and vapors to disperse.

5. If the pesticide product contains only active ingredients which ar Toxicity Category III or IV, the reentry interval shall be the time neces for sprays to dry, dusts to settle and vapors to disperse.

6. If the pesticide product contains more than one active ingredient, reentry interval shall be the longest interval among the active ingredi determined by the criteria in paragraphs 1 through 5.

C. Reentry for special circumstances is allowed for any of the follow

1. Irrigating, but only with suitable protection such chemical-resistant boots and gloves.

2. Operating tractors and other machinery, if the employee is n contact with the plants.

3. Other maintenance or scouting procedures where urgent cond justify early reentry, but only with the protective clothing and equ specified by the pesticide product labeling.

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R4-13-706. Decontamination and washing facilities

A. An employer shall provide a change area for any employee who mixes, loads, applies or otherwise handles pesticides.

B. Potable water, soap and towels for routine washing of hands and face, and for emergency washing of the entire body shall be available for all employees at the worksite where they mix or load pesticides. A minimum of five gallons of water shall be present at the beginning of each workday for one employee and a minimum of ten gallons for two or more employees. This water shall be stored separate from that used for mixing with pesticides unless the tank holding water for mixing with pesticides is equipped with backflow prevention devices to prevent backflow of pesticides into the water. Any other available supply of potable water within one-quarter mile of the mixing and loading site is satisfactory for the purposes of this subsection.

C. Use of non-potable irrigation water is permitted for emergency decontamination procedures.

R4-13-707. Personal protective measures

A. An employer shall provide clean outer clothing, such as coveralls and chemical-resistant boots or overshoes, daily for each mixer, loader, applicator or other employee who handles Toxicity Category I or restricted-use pesticides and shall provide for cleaning of the clothing after any day when the employee handles the pesticides.

B. An employer shall provide all safety equipment required by the pesticide product labeling and provide for its cleaning after each day's use. The employer shall require that all personal protective equipment is maintained and kept in a clean, specially designated place when not in use.

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This clothing and equipment shall remain the property of the employer. requirements of this subsection do not supersede pesticide labeling stateme which are more restrictive.

C. An employer shall provide and require employees to wear spl resistant goggles or face shields appropriate to safeguard against pestic exposure when engaged in:

1. Mixing and loading activities.

2. Adjusting, cleaning or repairing contaminated mixing, loading application equipment.

3. Ground application activities using hand-operated or vehicle-mou or towed equipment except when:

a. Injecting or incorporating pesticides into soil; or

b. Vehicle-mounted spray nozzles are located below and behind employee and the nozzles are directed downward.

D. Respiratory protection shall be approved by the National Institut Occupational Safety and Health (NIOSH) or the Mine Safety and He Administration (MSHA) or the U.S. Department of Agriculture (under provision of 30 CFR Part 11, revised July 1, 1988, pages 18 thru 82, whi incorporated herein by reference and on file with the Office of the Secr of State) for the specific chemical and exposure condition. The emp shall change all respirator filter pads and cartridges in the manner and the frequency recommended by the manufacturer but in any event, the fi and cartridges shall be changed after not more than eight hours of a use. If respiratory protection is required, a full face respirator meet requirements of this subsection.

E. For all Toxicity Category I and restricted-use pesticides, and f other pesticide where the product label states "avoid contact with skin not get on skin," or a similar statement, employees shall

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chemical-resistant gloves when engaged in:

1. Mixing and loading activities.

2. Adjusting, cleaning or repairing contaminated mix, load and application equipment.

3. Hand application activities including use of hand-held equipment.

If a specific type of glove is not specified on a product label, gloves made of rubber, neoprene or other chemical-resistant material that provides equivalent or better protection from the pesticide being handled shall be used.

F. If use of gloves is required by subsection E, the employer shall provide employees with clean gloves each workday. Clean gloves shall be either:

1. Unused gloves.

2. Previously used gloves which have been thoroughly washed in soap and water.

G. If labeling specifies the use of waterproof or chemical-resistant pants and coat or a rain suit, an employer shall provide and require the use of chemical-resistant protective clothing that covers the torso, head, arms, hands, legs and feet. An employee shall not be required to use protective clothing when conditions such as temperatures over 90° Fahrenheit, humidity or length of time required to complete a task could cause heat exhaustion or other heat-related illnesses. Employees working in the following situations are not required to wear chemical-resistant full-body protective clothing unless the pesticide product labeling specifies otherwise:

1. Employees mixing and loading pesticides through a closed system.

2. Employees working as applicators while in enclosed cabs.

H. If natural light in a mixing/loading area is not adequate to allow employee to read the label and work in a safe manner, an employer shall provide sufficient artificial light in such areas so that employees can saf

perform these activities.

I. An employer shall keep equipment used for mixing, loading or applyi pesticides in good repair and safe to operate. The Director or his designat agent may inspect at any reasonable time equipment used in mixing, loading a application of pesticides. An employer shall provide for the repair alteration of equipment with any safety defect to remove the hazard befc further use.

J. All openings on tanks used for mixing or applying Toxicity Categor or restricted-use pesticides shall be equipped with covers that will prev splashes and spills. Each tank with a capacity of more than 49 gallons t is used to mix or apply any liquid mixture derived from a Toxicity Categor or restricted-use pesticide shall have either:

1. A translucent tank or a properly functioning means to indic externally the internal liquid level in the tank.

2. A device on the tank or filler hose nozzle that will automatic stop the filling operation before the pesticide liquid mixture spills over top.

K. If closed systems are utilized, personal protective equipment is required unless the pesticide product labeling specifies otherwise.

L. Any employer who gives pesticide-contaminated clothing or equipmer another person for laundering or cleaning shall inform such person of pesticide contamination so that such person may take measures to pr himself from exposure to the pesticide contamination.

R4-13-708. Employees working alone; conditions

A. An employee is permitted to work alone with a pesticide in To: Category I or restricted-use pesticides during daylight hours only

arrangements have been made for the employee to make personal, radio o
telephone contact with the employer or the employer's designee at interva
not exceeding two hours.

B. An employee is permitted to work alone with a pesticide in Toxici
Category I or restricted-use pesticides during nighttime hours only whe
arrangements have been made for the employee to make personal, radio o
telephone contact with the employer or the employer's designee at interva
not exceeding one hour.

C. A pilot, mixer/loader and flagger team are deemed to be workir
together. In the case of two ground applicators working in the same field, a
additional person is necessary if the applicators can see each other
application vehicles.

D. This section does not apply to government personnel involved
inspecting, testing or sampling pesticides as part of their official duties.

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PESTICIDE APPLICATION RECORD

NOTE: This form must be completed same day as the application and it must be retained for 7 years. (Ref. RCW 17.2

1. Name of person for whom the pesticide was applied: .....

   Firm Name (if applicable): ..... Tel. No. ( ) .....

   Street Address: ..... City: ..... State: ..... Zip: .....

2. Licensed Applicator's Name: ..... License No. .....

   Firm Name (if applicable): ..... Tel. No. ( ) .....

   Street Address: ..... City: ..... State: ..... Zip: .....

3. Name of person(s) who applied the pesticide: .....

   Street Address: ..... City: ..... State: ..... Zip: .....

4. Date of Application: Year: ..... Month: ..... Day: .....

5. Application Crop or Site: ..... 6. Pest(s) to be controlled (PCO use only) .....

RECORD THE FOLLOWING FOR EACH LOAD:	Load # 1	Load # 2	Load # 3	Load #
7. Time of day:				
8. Direction and estimated velocity of wind at time of application:				
9. Temperature at time of application (degrees F.):				
10. Apparatus license plate number (if applicable):				

11. Pesticide information (please list all information for each pesticide in the tank mix):

Brand Name	Active Ingredients	EPA Reg. No.	Total Tank Mix Applied/Acre or other measure	Concentration Ap
			/	
			/	
			/	
			/	
			/	

12. Location of Applications and area treated:

    Township: ..... N

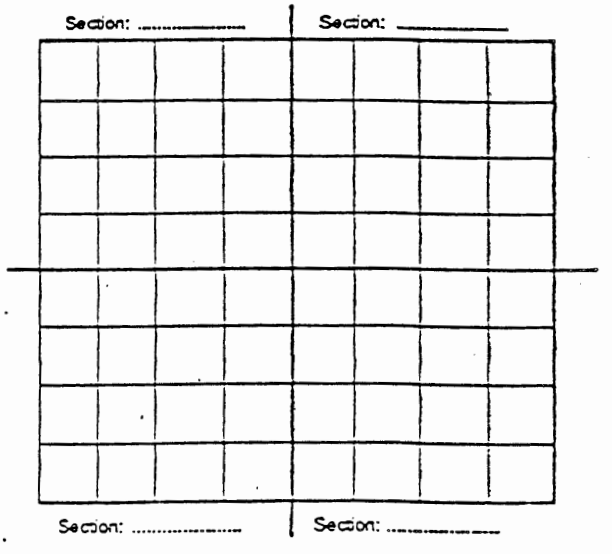
    Range: ..... E or W (please indicate)

    Section(s): .....

    County: .....

    Acres treated: .....

The map to the right is divided into 4 sections with each section divided into quarter-quarter sections. Please complete it by marking the appropriate section number(s) on the map and indicate as accurately as possible the location of the area treated.



If this is a right-of-way application, or if a street address would better pinpoint the exact location of the application, please describe the location: .....

.....

12. Other applicable information: .....

AGR 4227(7/89)

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TITLES 3 AND 26, DEPARTMENT OF FOOD AND AGRICULTURE

NOTICE IS HEREBY GIVEN

The Director of the Department of Food and Agriculture proposes to repeal sections 6438, 6440, 6636, 6806 and 6806.1 in Titles 3 and 26 of the California Code of Regulations pertaining to pesticide use reports and records; adopt sections 6619, 6622, 6623, 6624, 6626, 6627, 6627.1 and 6628 pertaining to pest control notice requirements, operator and site identification numbers and pesticide use reports and records; amend section 6000 to define the term "agricultural commodity"; and amend sections 6562 and 6568 pertaining to pesticide dealer records and responsibilities.

Public hearings will be held at 10:00 a.m. on the dates and at the locations specified below:

Date: October 31, 1989

Location: Fresno County Agricultural Commissioner's Office
1730 South Maple Street
Fresno, California 93702

Date: November 1, 1989

Location: Sonoma County Farm Bureau
970 Piner Street
Santa Rosa, California 95403

Date: November 6, 1989

Location: Los Angeles County Sealer's Office
11012 Garfield Avenue
Southgate, California 90280

Date: November 7, 1989

Location: State of California
Industrial Relations Building
1350 Front Street, Room 109
San Diego, California 92101

Date: November 8, 1989

Location: Salinas Community Center
940 North Main Street
Salinas, California 93901

Date: November 13, 1989

Location: California Department of Consumer Affairs
1020 N Street, Room 102
Sacramento, California 95814

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EXHIBIT
6
ALL-STATE LEGAL SUPPLY CO.

A representative of the Department of Food and Agriculture will preside at the hearing. Any interested person may appear and be heard. Persons who wish to speak are requested to register prior to the hearing. The prehearing registration will be conducted at the location of the hearing from 9:30 a.m. to 10:00 a.m. Generally, the registered persons will be heard in the order of their registration. Any other person who wishes to speak at the hearing will be afforded an opportunity to do so after the registered persons have been heard.

If the number of preregistered persons and other participants in attendance at the hearings warrants it, the presiding officer may limit the time for each presentation in order to allow everyone wishing to speak the opportunity to be heard.

Additionally, any interested person may present written comments relevant to the proposed action to the agency official named below by 4:30 p.m. on November 13, 1989, which is when the record will be closed.

INFORMATIVE DIGEST

This proposal would significantly alter the structure and expand the scope of the Department's pesticide record-keeping and use-reporting requirements.

The proposal would amend section 6000, which contains definitions that apply to Chapter 6, to define the term "agricultural commodity". The definition would be used in subsequent sections to identify who would be required to record and report pesticide use.

Currently, licensed pest control businesses engaged for hire are required to submit pesticide use reports and maintain records for all applications of pesticides. Other persons or agencies are only required to report the use of pesticides that require a restricted materials permit, or that are listed on the groundwater protection list for agricultural, outdoor institutional or outdoor industrial uses. The current use report and records requirements are divided into separate articles. The proposed action would repeal sections 6438, 6440, 6636, 6806 and 6806.1 and move these requirements to the article pertaining to pest control operations generally.

With some exceptions, existing regulations require that restricted materials be possessed and used only under permit of a county agricultural commissioner or the Director. There are no such regulatory requirements for non-restricted pesticides applied for agricultural use. This proposal would adopt section 6622 which would identify the types of pesticides and pesticide uses that would be subject to the expanded requirements. It would also require the operator of the property to obtain an annual operator identification number from the county agricultural commissioner prior to the purchase and application of those pesticides. It would also require the operator to provide the county agricultural commissioner with certain information.

Section 6428(b) now requires that each application for a restricted materials permit for agricultural use include the location of each property to be treated. Section 6434(b)(3) also requires that each such location be identified on the Notice of Intent prior to each application. However, there

are no current requirements that agricultural commodity sites treated with non-restricted pesticides be identified for purposes of monitoring pesticide use. The Department proposes to adopt section 6623 to require the operator of the property who is producing an agricultural commodity to obtain a site identification number(s). These would be obtained from each county agricultural commissioner for each site where pest control work is anticipated. The proposal would require that each site number be recorded on a restricted materials permit, if applicable, or on a form that includes specified information. Such information would be required to be maintained and available for inspection for two years.

Sections 6636 and 6438 require persons engaged for hire in the business of pest control to prepare and maintain records of each pest control operation. This action would repeal these sections and move these requirements, and add others, to section 6624. Specified persons, agencies or businesses, or anyone using certain pesticides, would be required to maintain pesticide use records. Certain exceptions would apply. Section 6624 would also require persons producing an agricultural commodity, or a licensed agricultural pest control business applying pesticides to such property, to record and maintain certain information for each site treated. The records would also include the operator and site identification numbers issued pursuant to sections 6622 and 6623. The proposal would require that the records be maintained and be made available for inspection by the county agricultural commissioner for two years.

Sections 6440 and 6636 currently prescribe when restricted materials permit holders and licensed pest control businesses must submit pesticide use reports. With some exceptions, pesticide use reports must be submitted to the county agricultural commissioner within seven days after use. The proposed action would repeal these sections and, instead, adopt section 6626.

Each operator of the property who is producing an agricultural commodity, (except livestock) would be required to report all pesticide applications made by the operator within ten days of each month in which pest control work is done. This proposed action also would specify what information must be on pesticide use reports for production agriculture.

Licensed agricultural pest control businesses applying pesticides to a property for the production of an agricultural commodity would continue to report pesticide usage every seven days. However, this action additionally would require such businesses to provide a copy of the pesticide use report to the operator of the property within 30 days of each application. Section 6626 also would specify the method of submitting pesticide use reports and designate the postmark as the delivery date.

Existing section 6440(c) provides for certain types of pest control work to be reported each month. This section would be repealed and, instead, section 6627 would designate who must submit a monthly summary pesticide use report. This proposed action would require such reports from persons required to maintain records pursuant to section 6624 (except those who are required to report pursuant to section 6626) and would specify what information would be required to be recorded and submitted to the Director.

Section 6636 now requires each licensed pest control business registered in a county to submit a negative pesticide use report to the county agricultural commissioner when no pest control work is performed during any month. This proposal would repeal section 6636 and move the negative use report requirement to section 6628. This action would require a negative pesticide use report from licensed agricultural pest control businesses and structural pest control operators. Such reports would be submitted by the tenth day of the month following that in which no pest control work is performed.

This proposal would adopt section 6619, requiring agricultural pest control businesses applying pesticides for the production of an agricultural commodity to notify the operator of the property within 24 hours of the completion of the application. The section would further specify the information required, and would require that the pesticide applicator and property operator retain those records for two years.

Section 6568(b) requires licensed pesticide dealers who sell a restricted material that does not require a permit to obtain a signed statement from the purchaser that he/she is a certified applicator. The proposed action would allow a dealer to obtain a copy of the purchaser's qualified applicator license or certificate as an alternative to obtaining a statement. The proposed action also would amend the statement requirements to include information about the type of certification or license, including the pest control categories for which the applicant is qualified, and validity of the certification.

An amendment to section 6568(c) would require licensed pesticide dealers, prior to the sale or delivery of pesticides, to obtain all operator identification numbers issued to the operator of the property, pursuant to section 6622. This action would require licensed pesticide dealers to send, on a quarterly basis, a list of operator identification numbers to the respective county agricultural commissioner, except the county where the dealer is located. The dealer would be required to maintain copies of the restricted material permit or form that contains the operator identification number, and make them available to the Director or county agricultural commissioner upon request.

COST TO LOCAL AGENCIES AND SCHOOL DISTRICTS

The Director has determined that no reimbursable or nondiscretionary costs or savings under section 17514 of the Government Code to school districts, and no costs or savings in federal funding to the State will result from the proposed action. The Director also has determined that the regulation does not impose a mandate on school districts.

The Director has further determined that the proposed action will impose a mandate on local agencies, specifically, county agricultural commissioners' offices; and that the costs of the mandate are reimbursable.

The Director has also determined that the proposed action will result in increased costs to a State agency, specifically, the Department of Food and Agriculture.

EFFECT ON HOUSING COSTS AND SMALL BUSINESSES

The Department of Food and Agriculture finds that the adoption of these regulation changes may have an adverse economic impact on some private persons and their businesses or small businesses. Although the extent of this impact cannot be determined at this time, it would be minimal upon those persons and businesses which are currently subject to the existing regulations. The impact on persons or businesses that would become subject to these regulations will likely be somewhat greater, but will be less for those that are maintaining business records. In adopting these regulations, the Department has determined that records on pesticide use are necessary to assess the health and safety of the people of the State due to occupational, dietary, and environmental uses associated with pesticide applications. The Department of Food and Agriculture has considered alternatives that would lessen any adverse economic impact on persons or businesses and invites you to submit additional proposals. Submissions may include the following considerations:

1. The establishment of differing compliance and reporting requirements or timetables which take into account the resources available to small businesses.

2. Consolidation or simplification of compliance and reporting requirements for small businesses.

3. The use of performance standards rather than design standards.

4. Exemption or partial exemption from the regulatory requirements for small businesses.

The Director hereby finds that the reports required by this action are necessary for the health, safety or welfare of the people of the State.

ALTERNATIVES CONSIDERED

The Director must determine that no alternative considered by the Department would be more effective in carrying out the purposes for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action.

AUTHORITY

This action is being taken pursuant to authority vested by sections 407, 11502, 12111, 12976, 12981, 14005 and 14102 of the Food and Agricultural Code.

REFERENCE

This action is to implement, interpret or make specific sections 11501, 11708, 11733, 12103, 12981, 14006, 14011.5, and 14019 of the Food and Agricultural Code.

AVAILABILITY OF INFORMATION: OFFICIAL AGENCY CONTACT

Copies of the Initial Statement of Reasons and the text of the proposed regulation may be obtained by contacting Nick Surjan [telephone (916) 322-5032], who is also the agency official to whom written comments should be directed. Address written comments to the Department of Food and Agriculture,

Pesticide Enforcement Branch, 1220 N Street, Room A-170, P.O. Box 942871, Sacramento, California 94271-0001. The rulemaking file is available for inspection at the same address.

FINAL ACTION

After the close of the comment period, the Department may adopt the proposal if it remains substantially the same as described in the Informative Digest. If the Department does make sufficiently related changes to the proposed regulation, the modified text will be made available for at least 15 days prior to adoption. Requests for the modified text should be made to the agency officer named above. The Department will accept written comment on any changes for 15 days after the modified text is made available.

9/5/89
DATE

Robert C Fox
for DIRECTOR

New Jersey State Library

INITIAL STATEMENT OF REASONS FOR PROPOSED CHANGES IN THE REGULATIONS OF THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE PERTAINING TO PESTICIDE USE REPORTING

INTRODUCTION

Pursuant to the requirements of Government Code section 11346.7 and California Code of Regulations (CCR), Titles 3 and 26, section 6110, this Initial Statement of Reasons has been prepared to describe proposed changes in the regulations of the Department of Food and Agriculture pertaining to Pesticide Use Records and Pesticide Use Reports.

The regulations at issue in this action are more comprehensive than any federal Environmental Protection Agency (EPA) regulations that are in effect at this time.

DISCUSSION

Section 6000. Definitions.

Digest: The terms "agricultural commodity" and "commodity" are currently defined in three different sections of the Food and Agricultural Code (FAC). These definitions are very broad and do not have the same meaning as the term proposed in this section. This action would define "agricultural commodity" as an unprocessed product of farms, ranches, nurseries and forests, except livestock, poultry and fish. The definition would be used in subsequent sections to identify who would be recording and reporting pesticide use.

Purpose: The purpose of this action is to clarify other proposed regulations that contain the term "agricultural commodity". This would also provide the public with an understanding of the parameters in which they would be regulated.

Basis: There are currently definitions of "agricultural commodity" and "commodity" in FAC sections 58554, 58605 and 59504. The Department is proposing to adopt several regulations that use this term, which has a different meaning than the definitions currently in place. The definitions in law pertain to marketing orders and include virtually all products (raw and processed) without exception. The proposed definition would contain exceptions and would not include processed products. The definitions currently in statute are not adequate because they are too general and, if referenced, would expand the scope of certain regulations beyond the Department's intent.

Repeal Section 6438. Pest Control Records

Digest: Current regulations require that each person engaged for hire in the business of pest control prepare and maintain records pertinent to each pest control operation. Such information is required to be submitted in writing (pesticide use report) to the county agricultural commissioner (CAC) of the county in which the work was performed. These records must be maintained for two years by the operator, and be made available for inspection by the

director or CAC upon request. At present there are multiple sections pertaining to these requirements. This provision currently is located in Subchapter 2, Restricted Materials, even though records are required to be maintained for both restricted and non-restricted material applications. The Department proposes to repeal this provision and to adopt new and separate sections for these two requirements that would expand the scope of the use reporting requirements by placing the regulations under Subchapter 3, Pest Control Operations (see Digest for Pesticide Use Reports). The amendments would specify who needs to keep such records and would indicate what information would need to be maintained. The proposal would include sections 6624, Pesticide Use Records; 6626, Pesticide Use Reports for Production Agriculture; and 6627, Monthly Summary Pesticide Use Reports.

Purpose: The purpose of this action is to separate, expand, and clarify the requirements for the maintenance of pesticide use records and the requirements for pesticide use reports. This section is currently located in the subchapter dealing with restricted materials. In addition, the Department proposes to expand the record keeping requirement to include property operators, public agencies and others in order to obtain more comprehensive information on total pesticide usage in California. This information will greatly aid pesticide use enforcement, as well as enhance environmental and worker safety protection. Repealing section 6438 will also prevent duplication of requirements in section 6624

Basis: Currently, regulations require that persons performing pest control work maintain records of certain pesticide uses. Licensed pest control businesses are required to prepare and maintain records pertinent to all pesticide applications (restricted and non-restricted materials). Private applicators (growers) are only required to maintain records for materials that have established reentry intervals that exceed the "spray is dry/dust is settled" period (section 6778, Records).

The Department is proposing to move these current record keeping requirements to a new and expanded pesticide use record system. It is necessary to repeal this section to avoid duplication of regulations since the requirements would be incorporated under new sections (see Basis for Pesticide Use Records)

The pesticide use record will serve two primary functions. It will provide more complete information on pesticide use in California. It is the basis for the information submitted on the pesticide use report. In addition, this new record keeping requirement will provide a means for growers to maintain in writing, the necessary reentry interval information, even though most growers generally tend to maintain some type of record of pesticide use (dates pesticides applied, and location).

Licensed pest control businesses are required to submit the information contained in the pesticide use record, on a prescribed form, to the CAC or director within seven days of use (pesticide use report). Growers and other end users of restricted materials are also required to submit use reports (section 6440, Pesticide Use Reports). The information contained in the use reports is subsequently reviewed and tabulated by the Department's Information Services Branch which publishes an annual summary of pesticide usage in California.

Repeal Section 6440. Pesticide Use Reports

Digest: This section currently requires growers holding a restricted material permit to submit pesticide use reports to the CAC or director within seven days after an application of a restricted material. Other users of restricted materials may instead submit pesticide use reports on a monthly basis. The section also requires licensed pest control businesses that do not perform work during any given month, to submit a negative use report to the CAC by the 10th day of the following month. This provision is currently located in Subchapter 2, Resticted Materials.

This proposal would repeal this section and move it to a more appropriate location under Subchapter 3, Pest Control Operations: sections 6626 (Pesticide Use Reports for Production Agriculture), 6627 (Monthly Summary Pesticide Use Reports), and 6628 (Negative Pesticide Use Reports). The amended sections will specify who will need to report, the form in which the information is to be submitted, and the information that will be required. In addition, the Department proposes to expand the pesticide use reporting requirement to include non-restricted agricultural use pesticides by property operators, public agencies and others, and post-harvest commodity treatment in the already existing use reporting requirements for licensed pest control businesses and permit holders.

Purpose: Requirements for pesticide use reporting appear in four different locations (sections 6438, 6440, 6636, and 6806). The purpose of this action is to consolidate these existing requirements under two, more concise sections.

Basis: Section 6440 is currently in the article pertaining to the restricted material permit system. To expand the requirements, a more appropriate location would be under the article pertaining to general pesticide control operations. Current regulations require permit holders (property operators and others) to submit pesticide use reports whenever they use a restricted material. Licensed pest control businesses must submit pesticide use reports for all pesticide applications (restricted and non-restricted materials). This reporting reflects only a portion of the pesticide usage in California. Providing the impetus for the expansion of the reporting system is the increased interest on the issue of pesticides from the general public, consumer groups, food processors, packers, legislators and others who want to know exactly what is used on the foods that they eat. The Department recognizes this need and thereby proposes a reorganized and expanded pesticide use reporting system to capture more of this information. This will better enable the Department to address food safety, worker safety and environmental issues, as well as make enforcement of pesticide laws and regulations easier.

The proposed changes would establish mandatory pesticide use reporting for virtually all users of agricultural use chemicals. All pesticide uses for the production of an agricultural commodity (including nurseries, turf farms, forest lands) and pesticide uses in right-of-ways, ditchbanks, cemetaries, parks, etc., would be included.

Section 6562. Dealer Records.

Digest: Licensed pesticide dealers are currently required to prepare and

maintain for two years records of pesticides sold or delivered. The regulation requires that dealer records include a copy of a pest control adviser's written recommendation with the sales invoice, or a notice on the invoice indicating that no recommendation was made. This proposal would specify what additional information would be required, including the purchaser's name and address, the pesticide purchased (e.g., product name and formulation) and amount (e.g., number of containers and size), the date of purchase, an operator identification number issued by the CAC and the location where the pesticide(s) were delivered. This proposal would also specify that records be filed by purchaser's name and retained at the dealer's sales office. The dealer would also be required to make them promptly available for inspection by the director or CAC. Other editorial changes would be made for clarity.

Purpose: The purpose of this action is to clarify existing record keeping requirements and to provide consistency between dealers and the way they maintain their records. The ultimate purpose is to allow CAC's to efficiently monitor pesticide sales and use, resulting in better enforcement of pesticide laws and regulations.

Basis: Licensed pesticide dealers are currently preparing and maintaining records of pesticides in the form of sales invoices or delivery slips. The records may contain such information as the customer's name and address, the pesticide purchased, the amount of product sold, the date of sale or delivery, and, in some cases, the location where the delivery was made. Complete and accurate records are necessary so the CAC can adequately monitor and enforce pesticide laws and regulations relating to pesticide sales and use. However, the regulation is unclear on what information must be included on the invoice, how these records should be maintained for review by the CAC, and the length of time they should be retained.

The Department and CAC's monitor and audit pesticide dealers to determine if they have complied with current regulations. Sales invoices of restricted materials are reviewed and compared with grower permits and use reports. The Department and CAC's also inspect the grower's records to determine whether a grower applied pesticides without obtaining a restricted material permit, failed to report the use, or misapplied pesticides. In these inspections, dealer records may be inadequate because the regulation is unclear as to what information is required on the record, how long these records should be retained and the format in which the records should be filed. Dealers who make cash sales are not required to include the purchaser's name and address on the record. This has made it difficult for CAC's to determine which pesticide sales were made to which individuals. This lack of customer identification makes it impossible to determine if the dealer and purchaser were in violation of current regulations.

Dealers are not required to identify the individual to whom the materials are delivered. Current law requires restricted pesticides to be sold or delivered only to a certified applicator. By requiring the name and location of the place where the pesticides were delivered, the CAC may then determine if the pesticides were delivered to a certified applicator. The Department has reviewed dealers' filing systems and has found that dealers maintain records in different locations and use many different systems to file records (e.g., by invoice number, purchaser's name, company name) which has, in some cases, prevented the CAC's from conducting thorough inspections. By requiring the dealers to maintain records by purchaser's name, and to maintain them at their

sales office, this proposal would standardize licensed pesticide dealer record keeping systems.

Prior to purchasing certain pesticides, the operator of the property would have to provide the dealer with their operator identification number (see Digest for Operator Identification Numbers). This number is necessary so the CAC can monitor the sales of certain pesticides by persons purchasing them outside of their county and determine whether they should have reported the use. The dealer may use this number for data entry purposes to identify a customer and to generate a list of purchasers for the CAC's (see Basis for Dealer Responsibilities).

Section 6568. Dealer Responsibilities.

Digest: The current regulation requires dealers to obtain a copy of a permit from the purchaser of a restricted material (requiring a permit) prior to delivery. This proposal would also require a dealer to obtain a permit prior to sale when a delivery is not made.

Restricted materials listed in sections 6400(b) and 6400(q) that do not require a permit can only be sold to certified applicators. Dealers are currently required to obtain a statement from the certified applicator purchasing the restricted material declaring his certification prior to delivery. This proposal would also require a dealer to obtain a signed statement from the certified applicator prior to sale. In addition, the dealer would have an option of obtaining a copy of the qualified applicator's license or certificate as an alternative to obtaining a statement.

This proposal would also make changes to the language of the certified applicator's statement. These include deleting the word "commercial", requiring the type of certificate or license to be identified and the expiration date of the license or certificate.

This proposal would also require a licensed pesticide dealer, prior to the sale of certain pesticides, to obtain a copy of an identification form (or restricted material permit) issued by the CAC to the operator of the property pursuant to proposed section 6622 (see Digest for Operator Identification Numbers). This form or permit would contain the operator identification number(s) of persons purchasing certain pesticides. If an operator of the property to be treated has been issued a restricted material permit, the CAC would record the operator identification number on that permit instead of issuing the number on a separate form. The pesticides affected in this proposal include agricultural use pesticides, pesticides designated as restricted materials, industrial use pesticides as a post-harvest commodity treatment, and pesticides listed in section 6000(b) for outdoor industrial and outdoor institutional use. The dealer would be required to retain a copy of these forms or permits for two years (the same duration as for other records). This proposal would also require a dealer to send a list of these numbers, with corresponding names, on a quarterly basis to the CAC of those counties which issued the number, except to the CAC in the county where the dealer is located. Other editorial changes would be made for consistency with other regulations.

Purpose: The purpose of this action is to establish an enforcement mechanism for the CAC so they can monitor pesticide sales and compare these sales to use

reporting. Editorial changes would be made so the regulation is consistent with an amended law (FAC section 14010). The statement given by the certified applicator would be revised for clarification.

Basis: In 1987, FAC section 14010 was amended and made it unlawful for any person to sell or deliver any restricted material to any person that is required to have a permit, unless such person provides a copy of the permit. This proposal would make the regulation consistent with the law. The Department proposes to add the word sale, where appropriate, to other subsections to provide for consistency throughout the regulation.

This proposal would require additional information on a certified applicator's signed statement, so the purchaser's type of license or certificate can be identified, and whether the license or certificate is valid. This requirement is intended to prevent persons from signing a statement using an invalid license or certificate.

The dealer currently must obtain a statement from the purchaser of a restricted material that does not require a permit [Federally restricted materials and pesticides listed in section 6800 (q)]. Statements are often difficult to obtain, because the purchase may take place over the phone or a noncertified person may pickup the pesticide. Since the information on the license or certificate is adequate proof of certification, the Department has determined that requiring a copy of the license or certificate is a viable option that will maintain the enforceability of the requirement.

Dealers are currently required to obtain a copy of a restricted material permit from certain persons purchasing restricted materials. This requirement is intended to prevent a purchaser from circumventing the requirement of obtaining a permit. This proposal would require the operator of the property who is purchasing certain pesticides to obtain an operator identification number from the CAC prior to the purchase and use of these pesticides. To prevent these persons from circumventing this requirement, this proposal would require the dealer to obtain a copy of the restricted material permit, or a form issued by the CAC which contains the operator identification number(s). The pesticide dealer would not be allowed to sell or deliver certain pesticides unless the purchaser first obtained and presented to the dealer an operator identification number. These forms or permits would be maintained by the dealer, to allow the commissioner to determine whether the operator of the property and dealer complied with these requirements.

Dealers would also be required to send a list of these operator identification numbers and the corresponding names of purchasers to the CAC of the county which issued the number. This will provide the CAC with information to determine whether a purchaser has or should submit a pesticide use report.

Section 6619. Pesticide Application Completion Notice.

Digest: Section 6618 currently requires each person performing pest control to give notice to the operator of the property to be treated before any pesticide is applied. The operator of the property is then required to notify all persons known to be on such property (or are likely to enter) due to the nature of the pesticide(s) and the precautions to be observed.

This proposal would additionally require an agricultural pest control business applying pesticides for the production of an agricultural commodity to notify the operator of the property treated, within 24 hours, that the pesticide application has been completed. An agent of the business (e.g., pest control adviser) would be allowed to notify the property operator, however, the business would ultimately be responsible for such a notice. The information in the notice would include the site or commodity and acreage treated, the pesticide(s) applied to the site or commodity, the date and hour the application was completed, and applicable reentry and pre-harvest intervals. If an agricultural pest control business determined that a property operator received a written recommendation from a licensed pest control adviser, accurately completed (containing the reentry and preharvest interval information), the business would not be required to notify the property operator of the reentry and preharvest interval information. The business could notify the operator of the property treated by either phone or in writing. The business would also be required to maintain a copy of the notice or a written record (phone log) that documents the notice was given. These records would be required to be maintained for two years. The operator of the property treated would also be required to maintain records of the notice by site for two years.

Purpose: The purpose of this action is to ensure the operator of the property treated is provided with the most current information regarding the pest control work done on their property, in order to protect persons who may enter those fields.

Basis: Section 6618 currently requires the applicator to notify the operator of the property that an application will occur. However, this notice is only required prior to the application. This proposal would require a follow-up notice of pesticide completion, so information regarding the application is current and accurate.

Agricultural pest control businesses will occasionally have to reschedule a pesticide application because of weather, field conditions and availability of pesticide products. The pest control business will generally notify the property operator of the date and time of the pesticide application even though no requirement exists.

If an agricultural pest control business is scheduled to apply pesticides for a property operator, the pesticide dealer will usually deliver the pesticide products directly to the applicator's business location or airstrip. The property operator may never take possession of those products, and, therefore, may not know the reentry or preharvest interval since the label contains that information. This information may not be available until he receives a report from the agricultural pest control business that applied the pesticides. This proposal would provide the operator of the property treated with accurate information within 24 hours of the application that could be passed on to workers who may enter these sites.

Field workers or persons who may enter a treated field have the right to know what chemicals they may be exposed to and what precautions to take to reduce exposure. Section 6770 currently requires employers to inform employees who are entering fields treated with certain pesticides of the identity of the pesticide(s), the existence of the reentry interval and protective work procedures to follow. However, there is no mechanism in place that requires

the agricultural pest control business to give notice of a pesticide completion. The operator of the property treated obtains this information from a written recommendation provided by a pest control adviser, if such a recommendation is made, or the information in the pre-notice. The completion notice, as proposed, would ensure that complete and accurate information was transmitted to the operator.

Requiring records to be maintained by the operator of the property and the pest control business will aid in resolving discrepancies regarding reentry information. These records will also be used by commissioners during audits as verification of compliance with the notice requirement.

Section 6622. Operator Identification Number.

Digest: Section 6622 would require the operator of the property to obtain an annual operator identification number prior to the purchase and use of any agricultural use pesticide, any restricted pesticide, any industrial, post-harvest commodity treatment pesticide, and any outdoor institutional or outdoor industrial pesticide listed in section 6800(b). The operator of the property would obtain the identification number(s) from the CAC of each county prior to purchase or use of pesticides in that county. If the operator obtains a restricted material permit, the permit number will serve as the operator identification number.

When appyling for an operator identification number, the operator of the property would be required to provide the CAC a list of the counties in which pest control work will be performed and a list of all valid operator identification numbers.

Purpose: The purpose of this section is to provide a mechanism to identify purchasers and users of certain pesticides and to identify those pesticides. This mechanism is essential to identify property operators who use only non-restricted materials. A second purpose of the operator identification number is to provide the CAC an opportunity to review the use report regulations and procedures with the operator of the property when the identification number is issued. Finally, the operator identification number will be used by the pesticide dealer to identify the issuing county, in order to forward a list of purchasers to that county as required in section 6568(c).

Basis: There are currently no requirements for identification of persons purchasing non-restricted pesticides, thus the local CAC may be unaware of certain pesticide applications. Pesticide dealers are not required to maintain records by specific purchaser of non-restricted pesticides, which makes enforcement difficult. Investigations of non-restricted pesticides are often hampered by this lack of information.

Pesticide users are required to be aware of all applicable pesticide laws and regulations, including preharvest, worker reentry, and worker safety requirements. Many of these pesticide users have little contact with enforcement authorities and are not adequately informed of their responsibilities when using non-restricted pesticides. Requiring users of non-restricted pesticides to obtain an annual operator identification number will allow the resolution of many of these enforcement and education problems; problems that, in most cases, result from lack of information. The issuance of an annual operator identification number will give the CAC the opportunity to

inform the operator of applicable pesticide laws and regulations. This provides the CAC's staff time to educate the operator in a non-confrontational environment.

The operator identification number also will be used to identify purchasers of restricted and non-restricted pesticides. Pesticide dealers will obtain the operator's identification number along with the name and address of the purchaser. Pesticide dealers will be required to maintain these records by purchaser and dealers will also be required to compile lists of pesticide purchasers by county, and to send those lists to the county issuing the identification numbers. This information will be invaluable when conducting routine pesticide dealer audits or misuse investigations. County and State enforcement personnel will save valuable time during investigations of pesticide misuse.

In addition to the obvious enforcement benefits from identifying all pesticide users, there is a practical necessity for the operator identification number. Pest control operations are conducted by both property operators and pest control businesses. Both will have to identify the operator and application site on the pesticide use report. Both will need a consistent, uniform, statewide method to identify each operator and site. The operator and site identification numbering system will provide this method. These pesticide use reports will be submitted at different times throughout the year; monthly for property operators and seven days following the application for pest control businesses.

It is essential that each property operator be identified with a unique number for data entry into the Department's computer program. This is the only practical way that pesticide use information can be compiled for specific operators and application sites. This unique operator identification number coupled with the site identification number will permit data entry for each grower and site as the use report information is received throughout the year.

When appyling for an operator identification number, the operator of the property would be required to provide the CAC with a list of the counties in which pest control work will be performed and a list of all valid operator identification numbers. This requirement will allow the CAC to base the operator identification number being issued at that time on the number issued by a previous commissioner. The number will be different for each county, by incorporating the county code, but will specifically identify the operator. This provides consistency statewide for tracking reports and for reference in investigations. The operator identification number would be issued on the current Restricted Material Application Form, or on a similar form approved by the director. One numbering system would be used for both the restricted material permit number and the operator identification number

This section would exempt any person using a pesticide on livestock from the requirements of obtaining an operator identification number. This is partly based on section 11408 of the FAC, which exempts pesticides for the control of animal pests under the written prescription of a veterinarian from the "definition of an agricultural use pesticide". Further, section 6400 (r), exempts pesticides used on livestock or poultry from the requirements of a restricted material permit. The Department has estimated, from the Pesticide Use Report Annual, 1987, the number of pounds of pesticide active ingredients

used on livestock annually. This is a small percentage of the total pounds of pesticides used statewide in a year. The exemption of pesticide use on livestock from this section is consistent with existing exemptions and will have little impact because of the small amounts used and the low incidence of exposure from this group of pesticides.

The proposal would require all persons purchasing or using certain categories of pesticides (see Digest) to obtain an operator identification number. The operator identification number is a critical element of the mechanism for reporting these pesticides. There were three criteria used for choosing these pesticides: the first criteria involved the issue of food safety. Although Department residue sampling continues, year after year, to reaffirm the safety of agricultural commodities regarding pesticide residues, consumer advocates and the public still criticize the Department for not having complete pesticide use data, especially for pesticides used on fruits and vegetables. Thus, all pesticides for agricultural use, restricted pesticides, and pesticides used for industrial, post-harvest commodity treatments were included in this proposal.

The second criteria was consideration of human pesticide exposure. Applicator, field crew, or public exposure to pesticide residue is a primary concern of the Department. Complete pesticide use data, including non-restricted material use, will allow more thorough investigations of exposure incidents. This data can be used to determine human exposure values for different situations. Mitigation measures can be established for specific pesticides or groups of pesticides to reduce exposure. This will ultimately result in reduced pesticide incidents.

The third criteria was the potential environmental impact of pesticide use. Contamination of groundwater, exposure to endangered species, and many other environmental issues are important reasons to include in this section the pesticides listed in section 6800(b), Groundwater Protection List, as well as all agricultural use and restricted pesticides. Complete and site specific use data will allow the Department to focus their groundwater monitoring efforts in specific areas of the State, and to address issues relating to endangered species.

Section 6623. Site Identification Number.

Digest: There are no current requirements that agricultural commodity sites treated with non-restricted pesticides be identified for purposes of monitoring pesticide use or for reporting purposes. The Department proposes to adopt section 6623 to require the operator of the property who is producing an agricultural commodity to obtain a site identification number(s). These numbers would be obtained from each CAC for each site where pest control work is anticipated. If the site was modified (e.g., two sites combined or one site divided) the operator would have to obtain a new site number. The proposal would require that each site number be recorded on a restricted materials permit (if applicable) or on a similar form that includes designated information. Such information would to be maintained and available for inspection for two years.

Purpose: The purpose of this section is to identify each site where a pesticide application to an agricultural commodity will take place. This section also specifies the information necessary to identify the site and the

operator of the property. Each site and commodity must be identified with a unique identification number so that all pesticide applications to that site can be reported and the use information later correlated by the Department.

Basis: In order to record the pesticide use information, each application site must be identified. Since pesticide use reports will be submitted by property operators and pest control businesses for the same application sites, it is critical that application sites be identified specifically so that pesticide use information can be correlated accurately by the Department.

Site identification numbers would also aid investigations of pesticide misuse. Enforcement personnel will use the site identification numbers to focus on specific fields or commodities. This would result in more efficient and accurate pesticide misuse investigations. Additionally, Department scientists could use the site identification system to review use patterns for pesticides of possible health concern. The use information for non-restricted materials is currently incomplete. The operator and site identification numbering system would provide a mechanism for calculating the percentage of a crop treated. This information would be used to calculate dietary exposure when conducting risk assessments.

Pesticide applications to non-production agricultural sites will still be reported, but those sites would not be identified by a site identification number. There are no harvested edible commodities produced at these sites, thus, the percent of the crop treated to estimate dietary exposure is not needed. Generally, the same pesticides are used from year to year at these sites. Pesticide use remains relatively constant. The two concerns of human exposure and environmental exposure can be addressed without specific site information reported, therefore, the site identification number is not needed.

Section 6624. Pesticide Use Records.

Digest: Section 6438 currently requires each person licensed to engage for hire in the business of pest control to maintain records of specific information concerning each pest control operation. This information must be submitted on a use report to the director or CAC. Pursuant to section 6778, private applicators are not required to keep specific records of pesticide use unless the label has a reentry period on the pesticide label or in regulations. This section would specify who would maintain records of pesticide use, and would identify what records must be kept. Private and commercial applicators would be required to maintain records in certain situations, but pest control businesses would be required to maintain records in all situations. These records would be required to be maintained for two years.

As proposed, record keeping will be required for persons who use any pesticide for agricultural use (pursuant to section 11408, FAC); those engaged for hire in the business of pest control; persons who use outdoor industrial and institutional pesticides listed in section 6800 (Groundwater Protection List Pesticides); and, those who apply pesticides for any post-harvest commodity treatment.

Those exempted from the record keeping requirement will include non-restricted pesticides for use: in the home; on livestock; in certain indoor industrial and institutional settings; and, by local districts/public agencies (mosquito

abatement), under a cooperative agreement with the California Department of Health Services pursuant to section 2426 of the Health and Safety Code.

Records that are currently required to be maintained by a pest control business include the following information: treatment date, property operator, treatment site, commodity treated, total acres/units treated, pest, type and amount of material, equipment identity, applicator's name, and other information as required by the director or CAC. This proposal would, additionally, require the record to include the EPA or state registration number, which specifically identifies an individual pesticide product.

Property operators who are producing an agricultural commodity and licensed pest control businesses making applications to such properties would also be required to include the following additional information: a description of site location by county, section, township, range, base and meridian; treatment completion time; the operator and site identification numbers; and, total acreage/units at the site (planted acres).

Purpose: Any records now voluntarily kept by pesticide applicators have been invaluable during pesticide misuse investigations. Records kept by operators under investigation are important in establishing a pesticide use history for the suspected application site. Records kept by adjacent operators are important in investigations involving pesticide drift. Therefore, the purpose of this section is to require pesticide applicators to maintain records to provide the CAC's with information not included in the use report. This requirement would provide more complete and current information than would be available on the pesticide use report.

Basis: The Department proposes to repeal section 6438, Pest Control Records, and to combine existing record keeping requirements for pest control operators with expanded record keeping requirements for property operators, agencies, and businesses. Those entities that are required to keep pesticide use records are listed in this section. The Department used the three criteria of food safety, human health, and environmental impact when creating these categories. Any person who uses an agricultural use pesticide, a restricted pesticide, a Groundwater Protection List pesticide, section 6800(b), or an industrial post-harvest commodity pesticide must keep specific records. These categories of pesticide use meet all three of the criteria established by the Department. Protecting consumers from illegal pesticide residues, protecting workers and the public from residues resulting from both legal and illegal pesticide use, and protecting the environment, especially groundwater, and endangered species from pesticide residues is of primary concern to the Department. To do this, it is critical that these pesticide users maintain complete and specific pesticide use records and have them available for routine inspection or for investigation purposes.

Records of pesticide use on livestock have been exempted in this section. The reasons cited in the digest of the proposed regulations section 6622, Operator Identification Number, are valid for this exemption as well. Because of the existing exemptions in section 11408, FAC, and section 6400 (r) of these regulations, and because of the low percentage of total pesticide use and small number of pesticide illnesses involving these pesticides, it is unnecessary to require that records be kept of these types of pesticide use at this time.

This section will require pest control businesses to continue maintaining records. This includes structural and agricultural pest control applicators and continues the reporting requirements now in section 6438 for licensed pest control businesses. These records are usually well maintained and of immeasurable value during investigations of pesticide misuse by the pest control business or by property operators.

All pesticide applicators required to maintain records will keep specific information in those records. These information requirements are based on the current record keeping section 6438 with some deletions and additions. Date of treatment; name of owner or operator of the property; crop, commodity, or site treated; location of the property treated; total acreage or units treated; pesticide and amount used; and, identity of the person who made or supervised the application are currently required in section 6438. Listing of the pest treated and equipment identity would not be required; this information is not compiled by the Department and serves no enforcement function. Recording the EPA or state registration number would become a requirement, because this information is collected by the Department and specifically identifies the product, active ingredient, and formulation of the pesticide. The Department's Information Services Branch and the CAC's compare this number to the commodity listed on the use report to determine compliance with pesticide labeling. Each product has label directions, which may vary even if different products have the same active ingredient. CAC's can use the registration number in the records to identify labeled use directions and precautions, to determine whether violations have occurred during investigations of employee illnesses, drift, crop residue, crop loss or environmental contamination. Requiring this additional information in the records will be consistent with the information reported on the pesticide use report.

Additional records would be required of the operator of a property who is producing an agricultural commodity, and of a licensed agricultural pest control business applying pesticides to such property. The required information would identify the location of the property treated by section, township, and range; the hour the treatment was completed; the operator and site identification numbers; and the total acreage at the site. This information will be consistent with information required on the pesticide use report.

In addition, the operator of the property who is producing an agricultural commodity would be required to maintain records of all pesticides applied to his property, including applications made by pest control businesses This information will be consistent with requirements for reentry records.

The information in records required to be maintained by persons applying these pesticides will be used by CAC's during audits and investigations to verify compliance with pertinent laws and regulations. These records will be the basis for the information in the use reports, which the Department would eventually receive and use to address issues relating to potential pesticide exposure to humans and the environment.

Section 6626. Pesticide Use Reports For Production Agriculture.

Digest: Section 6636 requires each person engaged for hire in the business of pest control to maintain records of each pesticide use and submit a report, as

specified in section 6440, to the director or CAC of the county where that pest control work was performed. Section 6440 requires restricted material permit holders to make a report of pesticide use for each application of that restricted material to the director or the CAC of the county where the permit was issued. Section 6440 also requires that use reports be submitted seven days following the pesticide application; except for reports from (1) a public agency, including use by a contractor under a written contract with the agency, (2) persons performing residential and institutional pest control, (3) persons performing structural pest control, which are submitted by the 10th day of the month following the month in which the work was performed. These current sections would be repealed.

Section 6626 would combine all use reporting requirements for pesticide applications for the production of an agricultual commodity, as defined in section 6000. This would include applications by the operator of the property and agricultural pest control businesses. Section 6626 (a) would require the operator of the property which is producing an agricultural commodity to report each pesticide use that they applied to that site, crop, or commodity. These reports will be submitted by the 10th day of the month following the month in which the work was performed to the director or the CAC of the county where the application was made.

Section 6626 (b) would require pest control businesses to report the use of each pesticide they applied for the production of an agricultural commodity. This report must be submitted to the CAC of the county in which the pest control work was performed, within seven days of completion of the pesticide application. These requirements are consistent with current regulations. The pest control business would also send a copy of the report to the operator of the property where the pest control was done, within 30 days of completion of the pesticide application.

All other pesticide applications, including agricultural applications to nonproduction sites, would be reported on a monthly summary, which is addressed in section 6627.

Purpose: The purpose of this section is to specify the reporting requirements for both the property operator and the agricultural pest control business when applying pesticides in the production of an agricultural commodity. This will provide the information currently missing from the Department's pesticide use data base. The information will also be available for CAC's use when enforcing pesticide use laws and regulations.

Basis: Currently, use reports are required for each application of a restricted pesticide by the person who obtained the permit if they made the application, or from the pest control business if they made the application. Agricultural pest control businesses are required to report all pesticide applications, restricted and non-restricted, within seven days following the pesticide application. Section 6626 would combine the requirements of the four current use reporting sections into two sections. This proposal would separate the use reporting requirements into two categories: pesticides used in the production of an agricultural commodity; and pesticides used on nonproduction sites. Section 6626 addresses the reporting requirements for the former.

Providing the impetus for the expansion of the reporting system is the increased interest on the issue of pesticides from the general public, consumer groups, food processors, packers, legislators and others who want to know exactly what is used on the foods that they eat. The Department recognizes this need and thereby proposes a reorganized and expanded pesticide use reporting system to capture more of this information. This will better enable the Department to address food safety, worker safety and environmental issues, as well as make enforcement of pesticide laws and regulations easier.

Department scientists are responsible for evaluating pesticide risk to the public, to those applying the pesticides, to those performing work at application sites, and to the environment. A critical part of this risk assessment is knowledge of pesticide use patterns. The Department must know where, by site and commodity, the pesticide application was made in order to evaluate the potential hazard to workers, the public, and the environment. Pesticide use patterns may be the deciding factor when cancellation or mitigation of pesticide registration is considered.

Pesticide use reports from pest control businesses are now used by CAC's to focus specific commodity sampling for the Department's residue sampling programs. The additional use reports provided under the proposed expanded program will allow more complete information for this program. This information is also important when considering worker safety requirements for all pesticide applications.

The Department conducted 61 public workshops statewide to discuss the overall concept of use reporting with growers, pest control operators, pest control advisors, and other interested and affected groups. The consensus from these workshops concerning the frequency of reporting favored monthly reporting for property operators. Paper work reduction and consistency with billing and other normal business cycles were given as the two primary reasons. CAC's favored the monthly reporting interval for the same reasons, plus the additional reason of enforceability. Because of this consensus, the Department has chosen the monthly reporting interval for reporting by property operators.

Agricultural pest control businesses applying pesticides for the production of an agricultural commodity would continue to report pesticide use to the CAC within seven days of completion of the pesticide application. Pest control businesses have indicated that they would prefer to maintain the present system of reporting. Many businesses have invested in computer systems to comply with the current use reporting requirements. The Department was informed during the public workshop meetings and in writing that businesses favored the continuation of the present seven-day reporting system.

The pest control business would also be required to send a copy of the report to the operator of the property where the pest control was done, within 30 days of completion of the pesticide application. This requirement is neccessary so that property operators will have a complete record of all pesticide applications to each site and commodity. This information is also required by the property operator for reentry and preharvest purposes. Although section 6619, Pesticide Application Completion Notice, will provide some of the information on a more timely basis, the requirement for a copy of the report to be sent within 30 days to the property operator would be an

important written follow-up and the report would contain the remaining information.

The information required on the pesticide use report, except for the name of the person who made and supervised the application and the hour the treatment was completed, is the same as proposed in section 6624, Pesticide Use Records. The two above-mentioned requirements are required for records, but not for use reports. (See Basis for section 6624, Pesticide Use Records.) If the property operator and a pest control business are both making pesticide applications to the same site, they both must use the same site number. The pesticide use reports would be submitted on forms approved by the director.

Section 6627. Monthly Summary Pesticide Use Reports.

Digest: Currently, section 6440 requires that certain pesticide applications for public agency use, including use by a contractor under a written contract with the agency, for residential and institutional pest control, and for structural pest control, be reported within the 10th day of the month following the month in which the work was performed. This section also includes use reporting requirements for restricted pesticide permittees. The proposed section would require those now reporting to report on a monthly summary basis.

The proposed regulations would additionally require those property operators and pest control businesses who are included in the agricultural use definition, but who are not producing an agricultural commodity to also report. These applications would include golf courses, parks, cemetaries, and right-of-ways. Any person who uses a pesticide for industrial post-harvest commodity treatment, and any person who uses a pesticide listed in section 6800 for any outdoor institutional or outdoor industrial use would also be required to report.

The information would be submitted on a form approved by the director (See section 6627.1, Monthly Pesticide Use report Form).

Purpose: The main purpose of this requirement is to require certain persons using non-restricted pesticides used on non-production sites to report this use on a monthly summary form. This section also clarifies who would report. These reports will provide much needed pesticide use information not now collected. This section would place the reporting requirements in a more appropriate section for those required to report.

Basis: Those who now report on a monthly summary basis would continue this reporting. The reason for this requirement was discussed under section 6624. (See Basis, section 6624, Pesticide Use Records).

This section clarifies and expands the requirements for use reporting to include all restricted and non-restricted agricultural use materials. Pest control businesses using pesticides named above are currently reporting all pesticide use on a monthly summary basis. Only restricted pesticide use is reported by property owners and is reported within seven days following the application. This section would expand the reporting requirements for property operators to include reporting of non-restricted pesticides and would require both of these groups to report monthly. The Department is not requiring specific site, commodity, and location information for the monthly

summary reports because of the reasons discussed in the Basis for section 6622, Operator Identification Number, section 6624, Pesticide Use Records, and section 6626, Pesticide Use Reports For Production Agriculture. Records of pesticide use, including the application sites, will be available for follow-up investigations, if needed.

The information required for reporting is identical to that currently submitted on the monthly summary pesticide use report form. Section 6440 (current regulations) does not refer to the specific reporting information, but only to an approved form. A form is included in the proposed regulations, but many businesses and individuals now use computer generated use report forms. The Department needs the flexibility to approve these forms to allow for the efficient transmittal of use report information.

Section 6627.1 Monthly Summary Pesticide Use Report Form.

Digest: Certain non-agricultural pesticide users are now reporting their pesticide use on a monthly summary pesticide use report form. Agricultural non-production pesticide users will be required to report on a monthly summary pesticide use report form also. This section contains a copy of the use report form.

Purpose: The purpose of this section is to provide an example to the regulated public of the required monthly summary pesticide use report form.

Basis: The Department is requiring certain pesticide users to report on a monthly summary pesticide use report form. The form included in these regulations is now in use. The report form allows the user the option of using Designated Codes. These codes are not included in section 6627.

Section 6628. Negative Pesticide Use Reports.

Digest: Currently, reference is made to negative use reports in sections 6636 and 6440 (d), which require that, when no work has been performed during any given month, a licensed agricultural pest control business submit a report to that effect (negative use report) by the tenth day of the following month. A similar provision appears in the Structural Pest Control Act, section 8505.17 (c), requiring structural pest control operators to submit a negative use report to the CAC in the county in which a notice of business operation has been provided. The Department proposes to repeal sections 6636 and 6440, and to adopt new provisions (sections 6626 and 6627) requiring the submittal of pesticide use reports. This proposal will establish provisions in the regulations which will specify that for both agricultural and structural pest control businesses, negative use reports must be submitted when no work has been performed in applicable counties.

Purpose: The purpose of this action is to establish a provision which would enable the CAC to monitor and enforce the pesticide use reporting requirements.

Basis: Licensed agricultural and structural pest control businesses are currently required to prepare and submit negative use reports when no work has been performed. Negative use reports are used by the CAC in order to determine if, for any given month, work has been performed, and if so, have

use reports been submitted for work performed during any given month. This information is not utilized by the Department.

Repeal CCR Section 6636. Pest Control Records and Reports.

Digest: This combined record keeping and use reporting provision duplicates the requirements of section 6438, which requires each person engaged for hire in the business of pest control to maintain records and submit use reports for each pesticide application. Additionally, negative use reports must be submitted when no work has been performed. The Department proposes to repeal this section and adopt new and separate sections for these two requirements. Section 6636 is currently located under Subchapter 3, Article 2, Pest Contol Business Operations. As a result of the expanded scope of the regulation which will require virtually all users of agricultural use chemicals to maintain records and submit use reports, the amendments will be relocated to a more appropriate location in Subchapter 3, Article 1, Pest Control Operations Generally.

Purpose: The purpose of repealing this provision is to eliminate the duplication of sections that pertain to the maintenance and submittal of pesticide use records and reports.

Basis: This combined use record/use report section was adopted in order to require licensed pest control businesses to maintain records and submit use reports for non-restricted materials. As mentioned previously (Digests, sections 6438 and 6440), the Department proposes to adopt new regulations which will separate these two requirements. Records that are currently required to be maintained must include the following information: treatment date, property operator, treatment site, commodity treated, total acres/units treated, pest, type and amount of material, equipment identity, applicator's name, and, other information as required by the director or CAC. Under the proposal, changes in the information required for the pesticide use records will include the addition of the EPA or state registration number. The registration number is used by the CAC's and by the Department to identify a pesticide product by formulation and actual amount of active ingredient.

Repeal section 6806. Use Reporting.

Digest: Currently sections 6800 through 6806.1 specify requirements for pesticides labeled for agricultural, outdoor institutional or outdoor industrial use that contain listed chemicals designated as having the potential to pollute groundwater. Section 6806 requires that any person who applies a pesticide listed in section 6800 for any of the described uses to report the use monthly, by the 10th day of the month following the month of use, unless such use is reported pursuant to sections 6440 or 6636. This section would be repealed and the requirements moved to sections 6626 and 6627.

Purpose: The purpose of this action is to repeal section 6806 in order to consolidate the requirements of groundwater reporting with other pesticide uses. This will eliminate duplicate regulations.

Basis: Currently pesticides listed in section 6800 for agricultural, outdoor institutional or outdoor industrial use are reported either monthly by the 10th day of the month following the month of use, or within seven days

following the application. The Department plans to repeal this section and consolidate these requirements in sections 6626, Pesticide Use Reports for Production Agriculture; and 6627, Monthly Summary Pesticide Use Reports. Use reporting regulations are currently scattered throughout the CCR. The consolidation of these requirements will avoid duplication. All requirements for entities reporting on the monthly summary basis will be located in one section. Reporting requirements for these pesticides would remain unchanged.

Repeal section 6806.1. Groundwater Protection List Use Report Form.

Digest: Current regulations require certain pesticides listed in section 6800 to be reported on a monthly basis. Section 6801.1 contains a reproduction of the form used to report these chemicals. This action would repeal this section; the form would be reproduced in section 6627.1, without the specific reference to Groundwater Protection List Pesticides Only.

Purpose: The purpose of this action is to repeal section 6806.1 and to use the monthly report form, shown in section 6627.1, which is currently in use. This will consolidate and standardize the requirement for the form into one section. Repealing this section will avoid duplicate regulations.

Basis: Regulations require the reporting of pesticides listed in section 6800. Those pesticides are reported monthly on a form reproduced in section 6806.1. Excluding the statement across the center, "GROUNDWATER PROTECTION LIST PESTICIDES ONLY", this use report form is currently used by all entities required to report on a monthly summary basis. The Department proposes to repeal this section. The form reproduced in section 6627.1, Monthly Summary Pesticide Use Report Form, will be used to report those pesticides listed in section 6800, except for those persons reporting pursuant to section 6626. The reporting requirements for these pesticides are included in section 6627. Repealing section 6806.1 eliminates a form that is unnecessary. The proposed changes in the pesticide use reporting requirements will allow reporting on the monthly summary form.

ALTERNATIVES

The director has not considered any alternatives that would be more effective in carrying out the purposes for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action.

DATA RELIED UPON

1. Document: Description of an operator identification numbering system-California Department of Food and Agriculture, County Agricultural Commissioner Enforcement Letter 89-97. August 4, 1989.

2. Report of Pesticides Sold in California for 1988 by Pounds of Active Ingredient. Prepared by the California Department of Food and Agriculture, Pesticide Enforcement Branch.

3. Pesticide Use Report Annual 1987. Prepared by the California Department of Food and Agriculture, Pesticide Enforcement Branch.

4. Proposed Operator Identification Number Form and Proposed Pesticide Use Report Form - California Department of Food and Agriculture, County Agricultural Commissioner Enforcement Letter 89-97. August 4, 1989.

5. Report to the Pesticide Registration and Evaluation Committee from the Medical Toxicology Branch of the California Department of Food and Agriculture: Prioritization and Status of Active Ingredients for Risk Assessment (Report No. 18). April 21, 1989.

6. Summary of County Agricultural commissioners' Reports. Gross Values by Commodity Groups - California 1986 and 1987. Prepared by the California Department of Food and Agriculture, Agricultural Statistics Branch. August 1988.

7. 1988 Annual Commodity Sampling Report. Prepared by the California Department of Food and Agriculture, Pesticide Enforcement Branch. August 21, 1989.

8. Agricultural Civil Penalties Report. Summary of Fiscal Year 88/89. Prepared by the California Department of Food and Agriculture, Pesticide Enforcement Branch.

9. California Summary of Illness and Injury Reported by Physicians as Potentially Related to Pesticides - 1987. Prepared by the California Department of Food and Agriculture, Worker Health and Safety Branch. September 27, 1988.

10. Assembly Bill No. 2161. Introduced by Assembly Members Bronzan and Jones.

11. Survey of Pesticide Use Practices by California Citrus Growers. Analysis of a Survey Conducted by the California Citrus Mutual, Spring 1987. (Copy Available from the California Department of Food and Agriculture) October 1988.

12. Survey of California Processed Tomato Growers 1988. Prepared for the California Tomato Growers' Association. (Copy Available from the California Department of Food and Agriculture) December 12, 1988.

13. California Department of Food and Agriculture 1987 Crop Disposition Report (Draft). Prepared by the California Department of Food and Agriculture, Pesticide Enforcement Branch.

14. Regulating Pesticides in Food, The Delaney Paradox (Committee on Scientific and Regulatory Issues Underlying Pesticide Use Patterns and Agricultural Innovation). Board on Agriculture, National Research Council. National Academy Press, Washington, D.C. 1987.

TEXT OF REGULATION

Titles 3 and 26. California Code of Regulations
Chapter 6. Pesticides and Pest Control Operations
Subchapter 1. Pesticide Regulatory Program
Group 1. Definition of Terms
Article 1. Definitions for Chapter 6

Amend section 6000 by adding "Agricultural commodity", in alphabetical order, to read as follows:

6000. Definitions

"Agricultural commodity", for the purpose of this chapter, means an unprocessed product of farms, ranches, nurseries and forests (except livestock, poultry and fish). Agricultural commodities include fruits and vegetables; grains, such as wheat, barley, oats, rye, triticale, rice, corn and sorghum; legumes, such as field beans and peas; animal feed and forage crops; rangeland and pasture; seed crops; fiber crops, such as cotton; oil crops, such as safflower, sunflower, corn and cottonseed; trees grown for lumber and wood products; nursery stock grown commercially; Christmas trees; ornamentals and cut flowers; and turf grown commercially for sod.

Authority: Sections 407, 11502, 12111, 12781, 12976 and 14001, Food and Agricultural Code.

Reference: Sections 11408, 11410, 11701, 11702(b), 11704, 11708(a), 12042(f), 12103, 12971, 12972 and 12973, Food and Agricultural Code.

Subchapter 2. Economic Poisons
Group 4. Restricted Materials
Article 3. Permit System

Repeal section 6438:

~~6438. Pest Control Records.~~

Each person licensed to engage for hire in the business of pest control shall:

(a) Prepare and maintain a record of the following information concerning each pest control operation. Details shall be reported to the commissioner of the county in which the work was performed, or to the director in any county where there is no commissioner, on a form prescribed by the director as provided in 6440(b) and (e):

(1) Date of treatment;

(2) Owner or operator of property treated;

(3) Location of property treated;

(4) Commodity, animal, or site treated;

(5) Total acreage or units treated;

(6) Pest or pests controlled;

(7) Material and amount used;

(8) Identity of equipment used;

(9) Identity of person or persons who applied the treatment; and

(10) Other information required by the commissioner or director;

(b) All records required to be prepared and retained by the operator, and a copy of all records to be submitted to the director or commissioner, shall be maintained for two years and be available for inspection;

Repeal section 6440:

6440. Pesticide Use Reports.

(a) The holder of a restricted material use permit shall make a report after any use on a form and in a manner required by the director to the commissioner of the county where the permit was issued or to the director in any county where there is no commissioner. Such report shall be made within seven days after any use except uses that may be reported monthly in accordance with guidelines from the director. This report is not required if material is applied by a licensed agricultural pest control operator and included in the operator's report.

The director or commissioner may require reports other than and in addition to that stated above whenever the director or commissioner deems it necessary to adequately control the use of restricted materials.

(b) Except as provided in subsection (c) the report of pesticide use shall be submitted within seven days of the use.

(c) Reports for the following types of pest control shall be submitted by the 10th day of the month following the month in which the work was performed.

(1) Public agency use including use by a contractor under a written contract with the agency.

(2) Residential and institutional pest control.

(3) Structural pest control, and

(4) Other types approved by the director or commissioner.

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(d) When during any month a licensed agricultural pest control operator performs no pest control operation in a county in which he is registered, he shall submit a report stating this fact to the commissioner, or to the director in any county where there is no commissioner, by the 10th of the following month.

Subchapter 3. Pest Control Operations
Group 1. Licensing
Article 6. Pesticide Dealer Licenses

Amend section 6562 to read as follows:

6562. Dealer Records.

(a) All Each licensed pesticide dealers shall prepare and maintain for two years records of pesticides sold or delivered.

These records shall include the following:

(1) The purchaser's name and address;

(2) The pesticide purchased, and the amount;

(3) The date of purchase;

(4) The operator identification number(s) specified in section 6622, or a statement on the invoice indicating that the pesticides sold or delivered are not of the type specified in section 6622;

(5) A copy of either the an agricultural pest control adviser's written recommendation, or a copy of the following notice statement (or a substantially similar notice/ statement) on the invoice or delivery slip supplied to the customer:

No recommendation has been made by or provided to the seller concerning the use of the pesticide covered by this invoice/ ; and

(6) The location where the pesticide was delivered, including the name of the person who or business which received the shipment, if the dealer delivered the pesticide.

(b) The records shall be maintained at the sales office, filed by purchaser's name, for two years and made promptly available for inspection by the Director or commissioner upon request.

Authority: Sections 407 and 12111, Food and Agricultural Code.

Reference: Sections 11501 and 12110, Food and Agricultural Code.

Amend section 6568 to read as follows:

6568. Dealer Responsibilities.

(a) ~~The~~ Each licensed pesticide dealer that sell~~s~~ ~~of~~ a restricted material which requires a permit for its use or possession shall, before sale or delivery, obtain a copy of the permit.

(b) A restricted material specified in section 6400(b) (federally restricted use) or in section 6400(q) that does not require a permit for possession or use shall be sold or delivered only to a certified applicator. The ~~seller~~ dealer shall, before sale or delivery, obtain from the purchaser a copy of his qualified applicator license or certificate or a signed statement ~~from the purchaser~~ in substantially the following form:

I am a certified ~~commercial~~ applicator authorized by the scope of my _____, license certification No. _____
(license/certificate type)
to use the restricted material(s) I am purchasing. My certificate/license is valid until _____.

_____
(Certified Applicator) (Date)

(c) Prior to the sale or delivery of pesticides listed in section 6622, the dealer shall obtain from the purchaser a copy of the restricted material permit showing all operator identification numbers, if the purchaser has such a permit, or a copy of the form issued to an operator of the property pursuant to section 6622. The dealer shall send a list of these operator identification numbers with corresponding names received during the quarter, within 10 days following the end of each quarter of the calendar year, to each of the commissioners who issued the numbers. The dealer is not required to send the list to the commissioner of the county in which the dealer is located.

~~(c)~~ (d) The ~~seller~~ dealer shall retain for two years a copy of each form specified in section 6622, permit, or signed statement that pesticide purchasers provided to the dealer. These records shall be retained at ~~his~~ the dealer's sales office and be made ~~shall make them~~ promptly available to the Director or commissioner upon request.

Authority: Sections 407 and 14005, Food and Agricultural Code.

Reference: Sections 11501, 14006, 14010 and 14035, Food and Agricultural Code.

Group 2. Work Requirements
Article 1. Pest Control Operations Generally

Adopt section 6619 to read as follows:

6619. Pesticide Application Completion Notice.

(a) In addition to the notice required pursuant to section 6618, an agricultural pest control business applying pesticides for the production of an agricultural commodity shall give notice to the operator of the property

treated within 24 hours of completion of the pesticide application. This notice shall include the following information:

(1) the location of the property, and acreage treated;

(2) the pesticide(s) applied;

(3) the date and hour the application was completed; and

(4) the applicable reentry and pre-harvest intervals, unless a copy of a written recommendation made by a licensed agricultural pest control adviser, properly completed, was given to the operator of the property treated.

(b) The operator of the property treated shall maintain a record of the application completion notice(s) he or she receives by site.

(c) The agricultural pest control business shall retain a copy of the notice given to the operator of the property, or maintain a written record which documents the name of the operator of the property who received the notice and the date and time the notice was given.

(d) The records required pursuant to this section shall be retained for two years and made promptly available to the Director or commissioner upon request.

Authority: Sections 407, 12976 and 12981, Food and Agricultural Code.

Reference: Sections 11501 and 12981, Food and Agricultural Code.

Adopt section 6622 to read as follows:

6622. Operator Identification Numbers.

(a) Prior to the purchase and use of pesticides listed below, each operator of property to be treated, shall obtain an operator identification number from the commissioner of each county in which the operator intends to perform pest control.

(1) Any pesticide for agricultural use, as defined in Food and Agricultural Code section 11408, excluding those for use only on livestock, as defined in Food and Agricultural Code section 18663;

(2) Any pesticide listed in section 6400, except those listed in subsection (r);

(3) Any pesticide for industrial use as a post-harvest commodity treatment; and

(4) Any pesticide listed in section 6800(b) for any outdoor institutional or outdoor industrial use.

(b) Each operator of the property to be treated shall provide the commissioner with a list of the counties in which pest control will be performed and all valid operator identification number(s) issued by other commissioners. The number(s) provided by the operator of the property shall be recorded by the commissioner on the operator's restricted material permit or on a form approved by the director.

(c) The operator of the property to be treated shall be issued an operator identification number from the commissioner of each county in which the operator intends to perform pest control. The number shall be recorded on

a restricted material permit, if the operator of the property has such a permit, or issued on a form approved by the Dire or, and shall be valid for a specified period not to exceed 12 months.

(d) The requirements of this section do not exempt an operator of the property to be treated from obtaining a restricted materials permit(s) or a qualified applicator certificate.

Authority: Sections 407, 12976, 13145 and 14005, Food and Agricultural Code.

Reference: Sections 11501, 12981, 14006 and 14011.5, Food and Agricultural Code.

Adopt section 6623 to read as follows:

6623. Site Identification Numbers.

(a) Prior to the use of pesticides(s) for the production of an agricultural commodity, the operator of the property shall obtain site identification number(s) from the commissioner for each site where pest control work will be performed. The site identification number(s) shall be valid for the same, concurrent, period of time as the operator identification number.

(b) The site identification number(s) shall be recorded by the commissioner on a restricted material permit, if the operator of the property has such a permit, or on a form approved by the Director. The information on the permit or form shall include:

(1) The name and address of the operator of the property;

(2) The operator identification number;

(3) The location, description, or map of the site(s) where the pest

control will be performed;

(4) A site idenfification number for each site where the pest control will be performed; and

(5) The date of issuance of the site identification number(s).

(c) The operator of the property shall retain a copy of each restricted material permit or form for two years and make them promptly available to the Director or commissioner upon request.

Authority: Sections 407, 12976, 13145 and 14005, Food and Agricultural Code.

Reference: Sections 12981, 14006 and 14011.5, Food and Agricultural Code.

Adopt section 6624 to read as follows:

6624. Pesticide Use Records.

(a) The following persons shall maintain records of pesticide use:

(1) Any person who uses a pesticide for an agricultural use as defined in Food and Agricultural Code section 11408, other than use on livestock as defined in Food and Agricultural Code section 18663;

(2) Any person who uses a pesticide listed in section 6400, except those listed in subsection (r);

(3) Any person engaged for hire in the business of pest control;

(4) Any person who uses a pesticide for industrial post-harvest commodity treatment; and

(5) Any person who uses a pesticide listed in section 6800(b) for any

outdoor institutional or outdoor industrial use.

(b) The records shall include the following information for each pest control operation:

(1) Date of application;

(2) Name of the operator of the property treated;

(3) Location of property treated;

(4) Crop, commodity, or site treated;

(5) Total acreage or units treated at the site; and

(6) Pesticide, including the Environmental Protection Agency or State registration number which is on the pesticide label, and amount used.

(c) In addition to the information required in subsection (b), the operator of the property which is producing an agricultural commodity and an agricultural pest control business applying pesticides to such property shall include in the records the following information for each pest control operation:

(1) Location of the property treated, by county, section, township, range, base and meridian;

(2) Hour the treatment was completed;

(3) The operator identification number issued to the operator of the property treated;

(4) The site identification number issued to the operator of the property treated.

(5) Total acreage (planted) or units at the site; and

(6) Name or identity of the person(s) who made and supervised the application, if the pesticide application was made by an agricultural pest control business.

(d) The operator of the property which is producing an agricultural commodity shall maintain records of pesticides applied by an agricultural pest control business to such property, by site.

(e) The records required pursuant to this section shall be retained for two years and made promptly available to the Director or commissioner upon request.

Authority: Sections 407, 12976, 13145 and 14005, Food and Agricultural Code.

Reference: Sections 11501, 11708, 11733, 12981, 14006 and 14011.5, Food and Agricultural Code.

Adopt section 6626 to read as follows:

6626. Pesticide Use Reports For Production Agriculture.

(a) The operator of the property which is producing an agricultural commodity shall report the use of pesticides applied to the crop, commodity, or site to the commissioner of the county in which the pest control was performed. This report shall be hand-delivered or mailed, by the 10th day of the month following the month in which the work was performed. This report is not required if the pesticide use is reported to the commissioner by an agricultural pest control business as specified in subsection (b), however, the operator of the property treated shall retain a copy of the business's report by site for two years.

(b) An agricultural pest control business shall report the use of pesticides applied by it for the production of an agricultural commodity to the commissioner of the county in which the pest control was performed, by hand-delivery or by mail, within seven days of completion of the pesticide application. A copy of the report shall be sent by the business to the operator of the property where the pest control was done, within 30 days of completion of the pesticide application.

(c) Each report of pesticide use pursuant to this section shall be on a form approved by the Director. The information to be reported shall include the information specified in section 6624 and the name and address of the agricultural pest control business which made the application, if such a business made the application.

(d) If the report is mailed, the postmark shall be the date of delivery.

(e) If the county in which work was performed has no commissioner, the report shall be made to the Director.

Authority: Sections 407, 11502, 12976, 13145 and 14005, Food and Agricultural Code.

Reference: Sections 11501, 11708, 11733, 12981, 14006 and 14011.5, Food and Agricultural Code.

Adopt section 6627 to read as follows:

6627. Monthly Summary Pesticide Use Reports.

(a) Except as provided in section 6626, persons required to maintain pesticide use records pursuant to section 6624 shall report a summary of the

monthly use of pesticides to the commissioner of the county in which the work was performed. The report shall be provided to the commissioner by the 10th day of the month following the month in which the work was performed. If the report is mailed, the postmark shall be the date of delivery.

(b) The report shall be on a form approved by the Director and shall include the following:

(1) The name and address of the person who or business/organization which applied the pesticide(s);

(2) County where the pest control was performed;

(3) Month and year of pesticide use;

(4) Crop, commodity or site treated, except when using a designated use code, as specified on the Monthly Summary Pesticide Use Report form;

(5) Pesticide, including Environmental Protection Agency or State registration number which is on the pesticide label, and the amount used;

(6) Number of applications made with each pesticide and the total number of applications made during the month; and

(7) Total acreage or units treated with each pesticide, except when using a designated use code, as specified on the Monthly Summary Pesticide Use Report form.

(c) If the county in which the work was performed has no commissioner, the report shall be made to the Director.

Authority: Sections 407, 11502, 12976, 13145 and 14005, Food and Agricultural Code.

Reference: Sections 11501, 11708, 11733, 12981, 14006 and 14011.5, Food and Agricultural Code.

Adopt section 6627.1 to read as follows:

6627.1. Monthly Summary Pesticide Use Report Form.

DISTRIBUTION: ORIGINAL – COUNTY
1ST COPY – APPLICATOR
2ND COPY – STATE

State of California
DEPARTMENT OF FOOD AND AGRICULTURE
INFORMATION SERVICES BRANCH
MONTHLY SUMMARY PESTICIDE USE REPORT

DATE SUBMITTED _____

OPERATOR (FIRM NAME)	COUNTY (WHERE APPLIED)	COUNTY NO	MONTH/S OF USE	NAME OF PERSON RESPONSIBLE FOR REPORT

ADDRESS	CITY	ZIP CODE

PHONE NUMBER	LICENSE NUMBER	RESTRICTED MATERIAL PERMIT NO.	TOTAL NO. OF APPLICATIONS

SUBMIT ORIGINAL AND SECOND COPY TO THE COUNTY AGRICULTURAL COMMISSIONER BY THE 10th OF THE MONTH FOLLOWING THE APPLICATIONS.

– COMPLETE COLUMNS A, B, C AND D FOR ALL USES –

IF USE IS:	CODE
– STRUCTURAL PEST CONTROL	1
– LANDSCAPE MAINTENANCE	3
– RIGHT-OF-WAY	4
– PUBLIC HEALTH PEST CONTROL	5
– VERTEBRATE PEST CONTROL	8
– REGULATORY PEST CONTROL	10

THEN:
- ENTER CODE IN COLUMN E
- LEAVE COLUMNS F & G BLANK

IF USE IS:
- COMMODITY FUMIGATION
- SPOT TREATMENT
- SEED TREATMENT
- OTHER (AS PERMITTED BY THE COUNTY AG. COMM.)

THEN:
- LEAVE COLUMN E BLANK
- FILL IN COLUMNS F & G

USE DEFINITIONS

STRUCTURAL PEST CONTROL — any pest control work performed within or on buildings and other structures. This includes work done by a licensed structural pest control operator.

LANDSCAPE MAINTENANCE — any pest control work performed on landscape plantings around residences, or other buildings, golf courses, parks, school grounds, cemeteries, etc.

RIGHT-OF-WAY — any pest control work performed along or on roadsides, power lines, ditch banks and similar sites.

PUBLIC HEALTH PEST CONTROL — any pest control work performed by or under contract with State or local public health or vector control agencies.

REGULATORY PEST CONTROL — any pest control work performed by public employees or contractors in the control of regulated pests.

	A	B	C	D	E	F	G
	MANUFACTURER AND NAME OF PRODUCT APPLIED	REGISTRATION NUMBER FROM LABEL INCLUDE ALPHA CODE	TOTAL PRODUCT USED (Circle One Unit of Measure)	NUMBER OF APPLICATIONS	CODE	COMMODITY OR SITE TREATED	ACRES/UNITS TREATED
1		– – –	LB OZ PT QT GA				
2		– – –	LB OZ PT QT GA				
3		– – –	LB OZ PT QT GA				
4		– – –	LB OZ PT QT GA				
5		– – –	LB OZ PT QT GA				
6		– – –	LB OZ PT QT GA				
7		– – –	LB OZ PT QT GA				
8		– – –	LB OZ PT QT GA				
9		– – –	LB OZ PT QT GA				
10		– – –	LB OZ PT QT GA				

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Adopt section 6628 to read as follows:

6628. Negative Pesticide Use Reports.

(a) When during any month a licensed agricultural pest control business performs no pest control work in a county where the business is registered with the commissioner pursuant to Food and Agricultural Code section 11732, it shall submit a report stating this fact to the commissioner, or to the Director in any county where there is no commissioner, by the 10th day of the following month.

(b) When during any month a licensed structural pest control operator performs no pesticide control work in a county in which he provided notice of business operation to the commissioner pursuant to section 15204 of the Food and Agricultural Code, he shall submit a report stating this fact to the commissioner, or to the Director in any county where there is no commissioner, by the 10th day of the following month.

(c) If the report is mailed, the postmark shall be the date of delivery.

Authority: Sections 407, 11502, 12976, 13145 and 14005, Food and Agricultural Code.

Reference: Sections 11501, 11708, 11733, 12981, 14006 and 14011.5, Food and Agricultural Code.

Article 2. Pest Control Business Operations

Repeal section 6636:

~~6636. Pest Control Records and Reports.~~

Each person engaged for hire in the business of pest control shall maintain records of and report on each pesticide use. Such records and reports shall be in the manner prescribed in Sections 3093.2 and 2439 and in addition shall identify the qualified person who made or supervised the application.

When a licensed pest control operator performs no pest control during a month in a county in which he is registered, he shall submit a report stating this fact to the commissioner, by the 10th of the following month.

Subchapter 4. Environmental Protection
Group 1. Groundwater
Article 1. Pesticide Contamination Protection

Repeal section 6806:

6806. Use Reporting.

Any person who applies a pesticide listed in Section 6800 for any agricultural, outdoor institutional or outdoor industrial use shall report such use monthly, by the 10th day of the month following the month of use, to the commissioner on the Department's Groundwater Protection List Use Report form, unless such use is otherwise reported pursuant to Section 6440 of Section 6626.

Repeal section 6806.1:

6806/I/ Groundwater Protection List Use Report Total

DISTRIBUTION: ORIGINAL — COUNTY
1ST COPY — APPLICATOR
2ND COPY — STATE

State of California
DEPARTMENT OF FOOD AND AGRICULTURE
INFORMATION SERVICES BRANCH
MONTHLY SUMMARY PESTICIDE USE REPORT

GROUNDWATER PROTECTION LIST PESTICIDE

DATE SUBMITTED _____

OPERATOR (FIRM NAME)	COUNTY (WHERE APPLIED)	COUNTY NO.	MONTH/YR. OF USE	NAME OF PERSON RESPONSIBLE FOR REPORT

ADDRESS	CITY	ZIP CODE

PHONE NUMBER	LICENSE NUMBER	RESTRICTED MATERIAL PERMIT NO.	TOTAL NO. OF APPLICATIONS

SUBMIT ORIGINAL AND SECOND COPY TO COUNTY AGRICULTURAL COMMISSIO BY THE 10th OF THE MONTH FOLLOV THE APPLICATIONS.

– COMPLETE COLUMNS A, B, C AND D FOR ALL USES –

IF USE IS:	CODE	IF USE IS:
-STRUCTURAL PEST CONTROL	1	-COMMODITY FUMIGATION
-LANDSCAPE MAINTENANCE	3	-SPOT TREATMENT
-RIGHT-OF-WAY	4	-SEED TREATMENT
-PUBLIC HEALTH PEST CONTROL	5	-OTHER (AS PERMITTED BY THE COUNTY AG. COMM.)
-VERTEBRATE PEST CONTROL	8	
-REGULATORY PEST CONTROL	10	
THEN:		THEN:
• ENTER CODE IN COLUMN E • LEAVE COLUMNS F & G BLANK		• LEAVE COLUMN E BLANK • FILL IN COLUMNS F & G

USE DEFINITIONS

STRUCTURAL PEST CONTROL — any pest control work performed within buildings and other structures. This includes work done by a li structural pest control operator.

LANDSCAPE MAINTENANCE — any pest control work performed on lan plantings around residences, or other buildings, golf courses, parks, grounds, cemeteries, etc.

RIGHT-OF-WAY — any pest control work performed along or on roa power lines, ditch banks and similar sites.

PUBLIC HEALTH PEST CONTROL — any pest control work performed by o contract with State or local public health or vector control agencies

REGULATORY PEST CONTROL — any pest control work performed by employees or contractors in the control of regulated pests.

	A MANUFACTURER AND NAME OF PRODUCT APPLIED	B REGISTRATION NUMBER FROM LABEL INCLUDE ALPHA CODE	C TOTAL PRODUCT USED (Circle One Unit of Measure)	D NUMBER OF APPLICATIONS	E CODE	F COMMODITY OR SITE TREATED	G ACRES TREA
1		– – –	LB OZ PT QT GA				
2		– – –	LB OZ PT QT GA				
3		– – –	LB OZ PT QT GA				
4		– – –	LB OZ PT QT GA				
5		– – –	LB OZ PT QT GA				
6		– – –	LB OZ PT QT GA				
7		– – –	LB OZ PT QT GA				
8		– – –	LB OZ PT QT GA				
9		– – –	LB OZ PT QT GA				
10		– – –	LB OZ PT QT GA				

GROUNDWATER PROTECTION LIST PESTICIDES ONL

PR-052 REV. 6/881

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FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

SCIENTIFIC ADVISORY PANEL

A Set of Scientific Issues Being Considered by the Agency in Connection with the Agency's Proposed Rulemaking for "Worker Protection Standards for Agricultural Pesticides"

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) has completed review of a set of scientific issues being considered by The Environmental Protection Agency (EPA) in connection with the Agency's proposed rulemaking for "Worker Protection Standards for Agricultural Pesticides." The review was conducted in an open meeting held in Arlington, Virginia, on March 2, 1988. All Panel members, except Dr. Thomas W. Clarkson, were present for the review. In addition, Dr. Wendell W. Kilgore, University of California, Davis, served as an ad hoc member of the Panel.

Public notice of the meeting was published in the Federal Register on Thursday, February 18, 1988.

Oral statements were received from staff of the Environmental Protection Agency and from Ms. Shelley Davis, Migrant Legal Action Program; Ms. Valerie A. Wilk, Farmworker Justice Fund, Inc; and, Ms. Laura Kelsey Rhodes, Public Citizen's Congress Watch.

In consideration of all matters brought out during the meeting and careful review of all documents presented by the Agency, the Panel unanimously submits the following report.

REPORT OF PANEL RECOMMENDATIONS

Proposed Rule for "Worker Protection Standards for Agricultural Pesticides"

The Agency requested the Panel to focus its attention upon three scientific issues relating to the proposed rule for "Worker Protection Standards for Agricultural Pesticides." There follow some general comments and the Panel's response to the issues:

EXHIBIT
1
ALL-STATE LEGAL SUPPLY CO

GENERAL COMMENTS

The Panel commends the Agency on improving the worker protection standards but we believe that in several aspects it does not go far enough in protecting the workers in their actual situations in the field. The philosophy of establishing only minimum standards seems inappropriate when more stringent standards have already been proven and accepted in California and Texas without detriment to the agricultural economy. The Panel is also concerned about ambiguous wording, and challenges the Agency to make requirements more explicit as well as more stringent.

The Panel strongly recommends that all workers applying pesticides should be required to take a training program that deals with the safe application of pesticides and their acute and chronic effects.

The Panel also recommends:

1. That names of pesticides used and the common symptoms of toxic exposure to these pesticides should be provided to workers on a routine basis.

2. That posting of fields be required following the application of pesticides having reentry intervals of 24 hours or more (instead of 48 hours or more).

3. That all communications should be in the language the workers understand.

ISSUE:

The Agency seeks the Panel's comments on the use of acute toxicity data and chemical class to establish reentry intervals.

Panel Response:

The Panel believes that acute toxicity data should be used for establishing reentry intervals. However, other indications of toxicity should also be used when appropriate, especially when it is known that a particular chemical may cause dermal or respiratory toxicity.

The Panel also recommends:

1. The establishment of longer reentry intervals with more flexibility, which take into account potential chronic and subchronic effects in addition to acute effects.

2. The establishment of meaningful reentry intervals for category III and IV pesticides.

3. That the Agency provides a list of compounds and the basis for their associated categorization of toxicity and reentry intervals.

ISSUE:

The Agency seeks any comments the Panel may wish to make regarding the exposure trigger for initiating cholinesterase monitoring. In addition, the Agency seeks any comments or suggestions the Panel may have on the proposed content of the guidelines.

Panel Response to the Above Issues:

The Panel suggests that a broader range of cholinesterase monitoring be considered, including triggering by shorter exposures (fewer days) and monitoring private applicators. If meaningful data are to be obtained, pre-exposure blood samples should be taken from workers to establish baseline information for comparative purposes. Even though hours of exposure are important triggering criteria, attempts to identify early symptoms of exposure should also be made. In this regard, recognition of symptoms of exposure to organophosphates and carbamates should be made a part of a training program.

FOR THE CHAIRMAN:

Certified as an accurate report of Findings:

Stephen L. Johnson
Executive Secretary
FIFRA Scientific Advisory Panel

Date: 3-9-88

Golf Course Superintendents Association of New Jersey

66 Morris Avenue, P.O. Box 359, Springfield, New Jersey 07081
(201) 379-1100 Fax # (201) 379-6507

S3741 Public Hearing - Tuesday, October 10, 1989

Golf Course Superintendents Association of New Jersey

Sec. 1-4 We oppose the bill as an attempt to supercede the regulatory process with a legislative agenda. This seems borne out by the fact that the bill would nearly double the number of representatives from the general public (6 to 11) and actually reduce the scientific qualifications of those members as well as include some members who by definition are against pesticide usage. This council is supposed to be a scientific body comprised of disciplines pertinent to pesticide usage and their environmental impact on society. It is not supposed to be either pro or con on the use of pesticides. The increase in the number of council members along with the accompanying technical advisory council we feel will open up the regulatory process to ill-informed people with an unfounded aversion to pesticide usage of any kind.

Sec. 5 We support the certification of all applicators with the understanding that it would take 2 to 4 years to phase this in because of the current limited number of trainers. We also support increased requirements and stricter testing for certified applicators licensing.

Sec. 7 We do not support the ban on aerial spraying on non agricultural or horticultural lands. This puts the regulatory process on the defensive forcing them to justify every non-agricultural or non-horticultural aerial application.

Sec. 19 This encourages law suits by individuals not necessarily harmed or damaged but purely because they have seen a violation on their property or others. There should be a need to prove damages before an individual can collect a judgement. This section seems one step removed from California's proposition 65 which allows a 25% bounty for an individual who reports a violation of that states pest control Act.

Sec. 20-K All costs of D.E.P. in administering and enforcing registration, certification and permit fees for pesticide manufacturing distribution and application are to be borne by fees charged to license manufacturers, distributors, and applicators. This would penalize a small segment of the population which is directly involved in pesticide usage while failing to recognize the overwhelming benefit to the general public by the use of pesticides in our society.

Gerald B. Fountain
G.C.S.A.N.J.
Government-Relations
Chairman

NJHA NEW JERSEY HOSPITAL ASSOCIATION

at the Center for Health Affairs

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Louis P. Scibetta FACHE
President

October 23, 1989

Mr. Dale Davis
Section Chief
Labor, Industry & Professions Committee
State House Annex
CN 068
Trenton, NJ 08625

Dear Mr. Davis:

I am enclosing a copy of a memorandum regarding the pesticide legislation, S3741, sponsored by Senator Lesniak. You will note from the memorandum that language has been recommended to amend the bill to exclude persons using ethylene oxide gas as a medical sterilent.

I would appreciate your assistance in conveying to the Committee the Hospital Association's request to amend this legislation.

Please feel free to contact me at (609) 275-4006 should you have any questions.

Thank you in advance for your cooperation.

Sincerely,

Oliver J. Bartlett
Asst. Vice President
Government Relations &
Regulatory Affairs

/nb

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OFFICE COMMUNICATIONS

NEW JERSEY HOSPITAL ASSOCIATION

DATE: October 16, 1989

TO: Oliver Bartlett

FROM: Edmund A. Abramovitz EA/jak

SUBJECT: S3741

I have had several engineers look at S-3741 regarding pesticides and amending existing environmental laws on pesticide application, and they all agree with me that there are some problems with the bill. Present regulations only require that supervisors of pesticide applicators be certified, and they can then supervise undercertified individuals. While this may be fine for most pesticides, we are very concerned about its applicability with ethylene oxide.

The people who work in federal supply really have better training in ethylene oxide use than any state certification course, which presently doesn't even address ethylene oxide directly. Our recommendation is that you approach the sponsor to obtain an amendment to the bill, with language similar to the following:

> This act shall not apply to persons using ethylene oxide gas as a medical sterilent.

Thanks for your assistance.

EAA:jak

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Testimony of Richard A. Fenske, Ph.D., MPH
Assistant Professor
Department of Environmental Sciences
Rutgers University
New Jersey Agricultural Experiment Station

to the

Senate Labor, Industry and Professions Committee
New Jersey State Legislature

October 10, 1989

I thank the Committee for the opportunity to express my views regarding the public health importance of minimizing human exposure to pesticides. I have conducted scientific studies of human exposure to pesticides for ten years. My research has been supported by various sources, including the United States Environmental Protection Agency, the United States Department of Agriculture, the National Institute of Occupational Safety and Health, the federal government of Canada, the New Jersey Department of Environmental Protection and the National Agricultural Chemicals Association.

I currently serve as Chair of the NJDEP Pesticide Review Committee, a group similar to the Pesticide Technical Advisory Committee proposed in this legislation. I also served as a technical advisor for the U.S. EPA Negotiated Rulemaking Procedure for Farmworker Protection Standards in 1985-86.

The public health implications of pesticide exposure are complex and fraught with uncertainty. The attempt to craft and implement regulations on this subject is indeed challenging. Considering the numerous legal and political issues surrounding this subject, it is most important that regulations be based as much as possible on our current scientific knowledge of health hazards, and within a context which emphasizes disease prevention.

I will restrict my comments to two specific areas: the relative magnitude of pesticide exposures among populations, and the importance of proper diagnosis and reporting of pesticide-related illness.

1. Pesticide Exposure.

We are exposed to pesticides every day in the normal routine of our lives. The foods we eat contain low levels of pesticides, as does the air we breathe. The U.S. Environmental Protection Agency recently conducted a random sample of homes in this country and found measureable levels of pesticides in indoor air in nearly all cases. Are such exposures of public health significance? I think it is safe to say that some probably are, some are not, and that in most cases the truth is obscured by a thick shroud of scientific uncertainty. There is great difficulty in assigning health risk to these exposures.

Several times in this bill the phrase "exposed to a pesticide" is employed, but the term is not defined. What is exposure? I can offer a working definition which we use in exposure analysis research: the amount of a disease agent reaching the body and available for absorption (via skin, respiratory system or gastro-intestinal system) over some time period. Reduced to its simplest form, exposure has occurred if any amount of pesticide can be measured in an individual's environment. Such a definition means that exposure has occurred if it can be detected, regardless of health significance. While this type of operational definition is appropriate for scientific research, it only becomes meaningful for public health practitioners when linked with toxicological or epidemiological data.

It is important to recognize basic differences in the magnitude of exposures which different populations receive. Exposure at a residence near a pesticide application site is likely to be expressed as micrograms (1/1,000,000 gram) or nanograms (1/1,000,000,000 gram) of the pesticide per hour for a relatively short period of time. In contrast, farmworkers entering treated fields under proper reentry procedures are likely to receive exposures of milligrams (1/1,000 gram) of pesticide per hour over extended time periods. While non-occupational exposures to pesticides may be significant in susceptible populations for whom even small exposures are of concern, it is clear that, in general, farmworkers are faced with a much more significant health risk.

It is normally assumed that mixers and applicators of pesticides receive the highest exposures among agricultural workers. While it is true that the potential for an accident resulting in acute intoxication is relatively high in this group, cumulative exposures received during harvesting and other hand labor activities may equal or exceed mixer/applicator exposures. Few studies have attempted to draw this comparison. A recent study conducted by TNO Medical Biological Laboratories in the Netherlands concluded that harvesters of cut flowers in greenhouses received higher weekly exposures than the pesticide applicators.

Thus, there is evidence to suggest farmworker exposure to pesticides may pose health risks. The notion that individuals should be aware of the health risks resulting from work is now generally accepted in our society, as evidenced by both federal and state right-to-know laws. That farmworkers should be included in a program of hazard communication seems self-evident. Indeed, it is well documented that agriculture is one of the more hazardous occupations, from either a safety (frequency of injury) or health (frequency of illness) point of view. Thus, it seems both appropriate and inevitable that hazard communication regarding pesticide exposure will become a necessary aspect of doing business in agriculture. It should also be kept in mind, however, that most farmers in New Jersey are primarily

cultivators of the land, and pesticide use represents only one component of a complex commercial enterprise. Farmers are not specialists in hazard communication. Thus, policies and procedures developed to create effective hazard communication must balance the needs of farmworkers and capabilities of farmers. I am certain that much of the testimony presented today will be aimed at clarifying how this balance can best be achieved.

2. Diagnosis and Reporting of Pesticide-Related Illness.

One of the most important components of the proposed legislation is the development of a medical education program and reporting system. Manadatory reporting of pesticide-related illnesses by physicians has been a part of California law for more than a decade, and has allowed that State to determine the prevalence of particular illnesses, and to identify specific compounds or use patterns which cause a disproportionate number of illnesses. Such information has provided important feedback for regulatory decisions. This type of reporting system is clearly dependent on the diagnostic expertise of the physician community in regions with high pesticide use. Thus, a program designed to educate physicians is a prerequisite to such reporting.

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SOMERSET COUNTY MOSQUITO EXTERMINATION COMMISSION

P. O. Box 3000, Somerville, NJ 08876

16 October 1989

STATEMENT ON SENATE BILL 3741

The Somerset County Mosquito Extermination Commission opposes Senate bill 3741 as it relates to mosquito control. Although there are meritorious ideas in the bill relating to other aspects of pesticide use, the Commission finds that there are many areas already provided for in current laws and regulations. Two examples that immediately spring to mind are the protection offered workers in the New Jersey "Conscientious Employee Protection Act" (N.J.S.A. 34:19-1 et seq.) and the farmworker protections provided in the regulations of the New Jersey "Pesticide Control Act (N.J.A.C. 7:30-9.18).

There are other parts of the bill with which the Commission has difficulty, such as making fees contingent on cost. While this provision may serve the admirable goal of making the Pesticide Control Program self-sufficient, we feel that it means the legislature is abdicating its duties of legislative oversight through the power of the purse. We do not believe that any governmental agency should be allowed such freedom. Legislators are the only control the public has over the administration, and we do not believe that such control should be surrendered without exceedingly good reasons.

Our difficulties with Senate bill 3741 lie in three areas: certification, notification and aerial application. We feel that in these three areas we are already well and justly regulated by the Pesticide Control Program of the Department of Environmental Protection.

First, regarding certification, mosquito control agencies could not utilize seasonal help if they had to be certified to apply pesticides. There is no way that we as responsible agencies disbursing public monies can have employees sitting around waiting for certification, and equally there is no way the Pesticide Control Program can provide such service in a timely manner.

We would call to your attention the fact that Pesticide Operators are required to receive annual training. We would further note that since the certification provisions of FIFRA came into effective, the Associated Executives of Mosquito Control Work has held eleven annual training sessions. This Commission has had all its pesticide-applying personnel attend these sessions whether they were certified or not even before the operator license program came into effect. Our superintendent has been responsible for the organization of all eleven training sessions in New Jersey so you can see we do take training seriously.

We would further call to your attention the fact that our employees are covered under the training provisions of the New Jersey "Worker and Community Right to Know Act" and that our superintendent is qualified as a trainer under that Act. All our employees must have

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intitial training under the Act and must receive annual training updates. One of the most specific provisions of the Department of Health educational guidlelines for the Act is that workers must receive training about the hazardous substances to which they are or may be exposed. Thus, their training about insecticides and insecticide safety are twofold.

The insecticides our employees use rate low on the toxicity scale. We use a granular formulation of temephos (Abate) that has an LD_{50} of 8600 (oral dose for male rats) as a larvicide, and this material will be replaced with *Bacillus thuringensis israeliensis* which has no listed toxicity to man. We also use Golden Bear Oil, a surfactant larvicide, which has an LD_{50} of greater than 15,000. When and if we adulticide, we use only Certified Pesticide Applicators for this work and we use either natural or synthetic pyrethrins for our work in built up areas and malathion in water where there is less interaction with people.

We do not believe that compulsory certification will help our personnel nor will it provide more training and we are certain that it will not benefit the citizens of New Jersey. We believe that mosquito control agencies should be exempted from this provision of the bill.

Second, that portion of the bill which specifically prohibits legal advertisements as a means of notification is very vague, leaving establishment of a methodology up to the Departments of Environmental Protection and Health in the event personal service notification cannot be accomplished. The notification provisions envisioned by the bill may be applicable to operations where the target is a specific group of trees or a particular agricultural crop and the number of people to be notified is limited, but they do not really seem applicable to mosquito control practices.

Mosquitoes are not a problem until they annoy people beyond reasonable levels. There may be many mosquitoes in an area, but if they are not perceived as a nuisance, then they will not be sprayed. There are areas where mosquito populations that emerge from flooded areas will migrate into populated areas and can be sprayed before they arrive and create a major nuisance. This type of decision is based on historical evidence of mosquito migration and a sound surveillance program. However, once mosquitoes have become a nuisance, they are among the people and when citizens call requesting spraying in their area, they are fully aware of the fact that there will be an insecticide in the spray zone. It is what they want, and in a three week period of the summer of 1989 we had more than four times the number of calls we would normally receive in a whole season requesting spraying.

Decisions to spray mosquitoes are not made on a long-term basis. Sometimes decisions to spray in the evening are made in the afternoon. The only notification that could be accomplished would be to have a PA system on the spray truck announcing the spray as it was being done, but the noise level of some sprayers is such that it might drown out the message. Also some spraying is done at late hours--10:00 p.m. or later--and to have a PA system blaring out in the night or early morning might cause more complaints than the mosquitoes and might unduly alarm people.

It should also be noted that notification for mosquito control would not involve relatively small numbers of people. There could be several thousands of people in a spray zone, and providing notification to them would provide a logistical and financial problem of no small dimensions. In an area where there are many competing radio stations, notification might be difficult to accomplish since one station might serve several counties and might feel that it would lose money (i.e. air time) by making too many announcements about mosquito spraying (spraying that might have to be scrubbed because of adverse weather conditions like rain, too little or too much wind or temperatures that were too high or too low). Advertisements in the main body of a newspaper run two to three times the cost of a legal advertisement, and have in the county in which they were used (Salem) caused no response from the public.

We believe that personal service notification is an ideal goal but it is not a realistic or an achievable one for mosquito control operations. We would suggest continuance of the present practice. If we were faced with a notification system that was unworkable and economically unrealistic, it would be easier to give up adulticiding until such time as the discontent of the citizens reached your ears and you reversed the position of the bill.

Finally, although we do not rely heavily on aerial application of insecticides in Somerset County, we are aware of the value of this tool to mosquito control. There are no narrow spectrum non-chemical adulticides for use in mosquito control. Although this fact of life is faintly recognized in the bill, mosquito control agencies would still be put in the position of having to go to yet another agency to be allowed to do the work assigned them by the various boards of chosen freeholders and the laws of New Jersey. Again, we believe that in this instance mosquito control agencies should be exempt from the provisions of Senate bill 3741.

We can appreciate the concerns that brought about this bill, but we do not believe that the record of mosquito control is such that its activities need to be so drastically truncated (as they obviously will be under the bill's provisions). We would recommend that mosquito control activities carried out under the provisions of N.J.S.A. 13:9 be exempted from Senate bill 3741.

Herbert Vollers, President

Adolph J. Barberi, Secretary

Henry R. Rupp, Superintendent

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