State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

TRENTON 08625

OFFICE OF THE COMMISSIONER

October 26, 1977

Task Force Members,

I've enclosed a copy of Commissioner Ricci's proposal to adopt the Task Force document for your information. A public hearing on the proposal will be held on November 28, 1977 in the Health and Agriculture Building, John Fitch Plaza, Trenton, at 10 a.m. Your comments at the hearing would be much appreciated.

Thank you again for your patience and cooperation in the development of this document.

Very truly yours,

Steven J. Picco, Chief
Office of Regulatory &
Governmental Affairs

Enclosure

CHAPTER 1E

DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES

SUBCHAPTER 1. GENERAL PROVISIONS

7:1E-1.1 Authority

These regulations are promulgated pursuant to N.J.S.A. 58:10-23.11 (P.L. 1976, c. 141), and N.J.S.A. 13:1D-1 et seq.

7:1E-1.2 Scope

These regulations cover every discharge of petroleum and other hazardous substances excepting those pursuant to and in compliance with the conditions of a valid Federal or State permit. The notification procedure at N.J.A.C. 7:1E-2.1 applies to the discharge of any hazardous substance in quantities or concentrations which will or may result in damage to lands, waters or natural resources within the jurisdiction of the State. These regulation set forth guidelines and procedures to be followed by all persons in the event of a discharge of petroleum or other hazardous substance. They also set forth certain reporting, design and maintenance requirements for major facilities which handle petroleum or other hazardous substances. For other regulations under N.J.S.A. 58:10-23.11 (P.L. 1976, c. 141), see Title 18 of the New Jersey Administrative Code (Department of the Treasury - Taxation).

7:1E-1.3 Definitions

The following words and terms, when used in this Chapter, shall have the following meanings unless the context clearly indicates otherwise.

(a) "Cleanup and Removal Activities" means actions to remove a discharge of a hazardous substance or the source thereof or to chemically neutralize the substance, or to prevent or mitigate any harmful effects the substance may have upon waters, lands, natural resources or upon public health, safety or welfare.

(b) "Cleanup and Removal Costs" means all costs associated with a discharge incurred by the State, its political subdivisions or their agents or any person with written approval of the Department, in the 1) removal or attempted removal of hazardous substances or 2) taking of reasonable measures to prevent or mitigate damages to the public health, safety, or welfare, including, but not limited to, public and private property, shorelines, beaches, surface waters, water columns and bottom sediments, solid and other affected property, including wildlife and other natural resources.

(c) "Commissioner" means the Commissioner of Environmental Protection.

(d) "Containment" or "Containment Activities" mean actions to limit or prevent the spread of a discharged hazardous substance.

(e) "Department" means the Department of Environmental Protection.

(f) "Discharge" means any intentional or unintentional action or omission resulting in the releasing, spilling, leaking, pumping, pouring, emitting, emptying or dumping of hazardous substance into the waters of the State or onto lands from which it might flow or drain into said water, or into waters outside the jurisdiction of the State when damage may result to the lands, waters or natural resources within the jurisdiction of of the State, excepting discharges pursuant to and in compliance with the conditions of a valid Federal or State permit.

(g) "Discharge Cleanup Organization" means an organization or association that engages in or intends to engage in cleanup and removal activities.

(h) "Division" means the Division of Water Resources in the Department, P.O. 2809, Trenton, New Jersey 08625.

(i) "Facility" means any place or equipment that is used to refine, produce, store, hold, handle, transfer, process or transport hazardous substances.

(j) "Hazardous Substances" include:

A. Petroleum and petroleum products

B. All pesticides designated as "prohibited", "restricted" or "specially restricted" pursuant to New Jersey Pesticide Control Act of 1971 (N.J.S.A. 13:1F-1 et seq.) at N.J.A.C. 7:30-1.5 thru 1.7 (Appendix A).

C. Substances identified as hazardous by the Federal Environmental Protection Agency at 40 FR 59961, December 30, 1975 proposed pursuant to Section 311 (b) (2) (A) of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1251 et seq. (Appendix B).

(k) "Major Facility" means any facility having total combined above-ground and buried storage capacity of 400,000 gallons or more, or an appropriate equivalent measure as set by the Director of the Division of Taxation in the Department of the Treasury for hazardous substances which are other than fluid or which are not commonly measured by the barrel. A vessel shall be considered a major facility only when hazardous substances are transferred between vessels. For the purposes of this definition, "storage capacity" shall mean only that capacity

which is dedicated to, used for, or intended to be used for storage of the hazardous substances listed in N.J.A.C. 7:1E-1.3(j).

(l) "Natural Resources" means all land, fish, shellfish, wildlife, biota, air, waters and other such resources owned, managed, held in trust or otherwise controlled by the State.

(m) "Owner or Operator" means with respect to a vessel, any person owning, operating or chartering by demise such vessel; with respect to any other facility, any person owning such facility, or operating it by lease, contract or other form of agreement; with respect to abandoned or derelict facilities, the person who owned or operated such facility immediately prior to such abandonment, or the owner at the time of discharge.

(n) "Person" means public or private corporations, companies, associations, societies, firms, partnerships, joint stock companies, individuals, the United States government, the State of New Jersey and any of its political subdivisions or agents.

(o) "Person in Charge of a Facility" means any person who has operating responsibility for a facility from which a discharge occurs at the time of the discharge.

(p) "Person Responsible for Causing a Discharge" means a person whose action or omission results in the discharge of a hazardous substance.

(q) "Petroleum" or "Petroleum Products" means oil or petroleum of any kind and in any form including, but not limited to, oil, petroleum, gasoline, kerosene, fuel oil, oil sludge, oil refuse, oil mixed with other wastes and crude oils.

(r) "Sewage" means domestic sewage including the contents and effluents of septic tanks, public sewer systems and public sewage treatment plants.

(s) "Sewage Sludge" means the dried or semi-liquid residue of a sewage treatment process.

(t) "Spill" or "Spillage" means any escape of hazardous substances from the ordinary containers employed in the normal course of storage, transfer, processing or use. A "spill" becomes a "discharge" only when hazardous substances reach waters of the State or lands from which they might flow or drain into said waters. See 7:1E-1.3(f).

(u) "Transmission Pipeline" means a pipeline which is a major facility and through which petroleum products or other hazardous substances are transported, together with the appurtenances associated with the functioning of the pipeline.

(v) "Vessel" means every description of watercraft or other contrivance that is practically capable of being used as a means of commercial transportation of hazardous substances upon the waters, whether or not self-propelled.

(w) "Waters" means the ocean and its estuaries to the seaward limit of the State's jurisdiction, all springs, streams and bodies of surface or groundwater, whether natural or artificial, within the boundaries of this State.

7:1E-1.4 Access

The owner or operator of a facility shall provide access to the facility to the Department during normal working hours and at any time when a discharge has occurred or appears imminent. The Department may take samples, photographs and statements of fact, and may make a general inspection to determine if the facility is in compliance with these regulations.

7:1E-1.5 Liberal Construction

These regulations, being necessary to promote the public health and welfare, shall be liberally construed in order to permit the Commissioner and the Department to effectuate the purposes of the law.

7:1E-1.6 Waiver

The Department, when it determines that the application of these rules would impair expeditious containment or cleanup and removal of discharges or endanger life, health or safety, may waive any provision of these rules.

7:1E-1.7 Relationship to Federal and State Law

These regulations are not intended to and do not relieve any person of the duty to comply with all other valid governmental regulations governing activities regulated hereunder, including regulations of the Department of Environmental Protection, Department of the Treasury and other appropriate State, Federal and local agencies.

7:1E-1.8 Severability

If any section, subsection, provision, clause, or portion of these regulations is adjudged invalid or unconstitutional by a court of competent jurisdiction, the remainder of these regulations shall not be affected thereby.

SUBCHAPTER 2. DISCHARGE NOTIFICATION AND RESPONSE

7:1E-2.1 Notification of Discharges

(a) As used in this subchapter, "reportable discharge" means any discharge of any hazardous substance which is in such quantity or concentration as may be harmful or which poses a forseeable risk of harm to public health or welfare, or to natural resources.

(b) The owner or operator or person in charge of any facility from which a reportable discharge occurs, or any other person responsible for causing a reportable discharge, shall immediately notify the Department at telephone number (609) 292-5560 during business hours or (609) 292-7172 at all other times. If a call to the first number is not answered, then the second number shall be called.

(c) A person who notifies the Department pursuant to paragraph (a) shall report the type of substance and the estimated quantity discharged, if known; the location of the discharge; actions the person reporting the discharge proposes to take to contain, clean up and remove the substance, if any, and any other information concerning the discharge which the Department may request at the time of notification.

(d) A copy of these notification requirements, printed in a conspicuous format, shall be displayed in a prominent place on the bridge or pilot house of any vessel which is ordinarily docked in this State, and at any transfer area of an onshore or offshore facility.

7:1E-2.2 Confirmation of Notification; Report

(a) The owner or operator of a facility from which a discharge of a hazardous substance has occurred shall send to the Division written confirmation of the notification of discharge within 60 days after giving notice to the Department as described above. Confirmation shall include a description of the discharge incident, including the source of the discharge, if known; a description of the measures taken to clean up and remove the discharge and any steps planned or already taken to prevent a recurrence of the discharge incident.

(b) In the case of a major facility, a submission pursuant to N.J.A.C. 7:1E-4.24 will be deemed to fulfill the requirements of this section.

(c) Confirmation letters shall be sent to:

Department of Environmental Protection
Division of Water Resources
P.O. Box 2809
Trenton, New Jersey 08625
ATTENTION: Discharge Confirmation

7:1E-2.3 Discharge Response

(a) Upon learning that a discharge of hazardous substance or any other substance has occurred, the Department shall act to contain, clean up and remove the discharge of any substance which the Department has specifically designated as hazardous in N.J.A.C. 7:1E-1.3(j), unless it determines that such action will be done properly and expeditiously by the owner or operator of the facility or source from which the discharge occurred, or by any other authorized person.

(b) The owner or operator of a facility from which a discharge has occurred, or any person responsible for causing a discharge, shall attempt to stop the discharge and shall take reasonable containment measures to the extent he is capable of doing so.

(c) The owner or operator of a facility from which a discharge has occurred may take immediate measures to clean up and remove the discharge, except that he may not apply chemicals without the prior approval of the Division or the Federal On-Scene Coordinator under the National Contingency Plan pursuant to 40 CFR Part 1510. Application of neutralizing agents, if done in comformity with an approved DCR plan approved by the Division, shall be considered to have the prior approval of the Division. Unauthorized use of chemicals shall be regarded as a prohibited discharge.

(d) The Department in its discretion may observe, supervise or participate in any aspect of containment or cleanup and removal activities. In the exercise of its supervisory power, the Department may order any person to cease operations if it determines that the person is not capable of properly containing, cleaning up or removing a discharge, or if that person fails to conduct cleanup operations in a proper and expeditious manner. All actions of the Department shall, to the greatest extent possible, be consistent with the National Contingency Plan for removal of oil and hazardous substances, 40 CFR Part 1510.

SUBCHAPTER 3. DISCHARGE CLEANUP ORGANIZATIONS

7:1E-3.1 Scope

This subchapter applies to all persons who engage or intend to engage in the cleanup and removal of discharges of hazardous substances, excepting owners or operators of major facilities covered by DCR Plans who intend to clean up only discharges from their own facilities. The coverage of this subchapter includes commercial cleanup contractors, cooperatives and other mutual-assistance association.

7:1E-3.2 Information to be Filed with Division

(a) All persons who intend to engage in the cleanup and removal of discharges of hazardous substances shall submit in writing to the Division the following information:

(1) Name of the organization;

(2) Form of the organization (e.g. corporation, cooperative association, etc.);

(3) Name(s) of executive officer(s);

(4) Mailing address of the organization;

(5) Address, telephone number and name of the manager of each office maintained by the organization;

(6) Name and address of the registered agent of the organization, if applicable;

(7) A list of the containment and removal equipment owned, leased, contracted or otherwise available for immediate response by the organization, including but not limited to, vehicles, vessels, pumps, skimmers, booms, chemicals, sorbents, hand tools and communication devices, and the location(s) of such equipment;

(8) Names of the trained personnel who are available to operate such equipment and a brief description of their qualifications;

(9) Portions of the State where the organization will respond to discharges.

SUBCHAPTER 4. MAJOR FACILITIES: PLANS, REPORTS AND STANDARDS

7:1E-4.1 Scope

This subchapter applies only to "major facilities" as defined in N.J.A.C. 7:1E-1.3(k).

The Division will accept as a DPCC and DCR plan a plan prepared in compliance with 40 CFR 112 where the provision of 40 CFR 112 are designed to accomplish the same purposes as these regulations. Where the State statute imposes additional mandates (i.e. groundwater protection), the degree of performance required to meet those mandates will be determined and will vary based on 1) the existing quality of the groundwater at the facility site and, 2) the actual or intended use of said groundwater.

7:1E-4.2 Definitions

The following words and terms, when used in this Subchapter, shall have the following meanings unless the context clearly indicates otherwise:

(a) "Impermeable Material" or "Impermeable Liner" means a layer of natural and/or man-made material of sufficient thickness, density and composition as to prevent the discharge into underlying ground water of any hazardous substances (or aqueous solutions thereof) for a period at least as long as the maximum anticipated time during which the hazardous substances will be in contact with the material or liner, as set forth in the DPCC plan.

(b) The words "shall" or "must" denote a mandatory requirement; the word "should" denotes a method or practice which is recommended but not required by the Department.

(c) "Best Practicable Technology" means:

(1) Such technology as will best reduce the likelihood of a discharge from the facility; and which

(2) Has been field-proven at the time of the Department's review, and which

(3) Can be installed at a reasonable cost.

(d) "Secondary Containment and/or Diversion System" means any structures, devices or combinations thereof designed to prevent spills of hazardous substances from becoming discharges.

7:1E-4.3 Information to be Filed with the Division

(a) The owner or operator of a major facility shall submit to the Division the following information in addition to the information required under sections 7:1E-4.4 and 7:1E-4.22:

(1) Name and location of the facility;

(2) Name(s) of the owner or operator of the facility;

(3) Name and address of the owner or operator's registered agent;

(4) Storage and transfer capacity of the facility;

(5) The types of hazardous substances listed in N.J.A.C. 7:1E-1.3(j) which are transferred, refined, processed or stored at the facility, excepting small quantities used for research or educational purposes only;

(6) Average daily throughput of the facility for each hazardous substance;

(7) The source, nature of, and conditions of financial responsibility for a discharge incident, established by any one of, or a combination of the following:

A. Insurance

B. Qualification as a self-insurer

C. Surety bonds payable to the New Jersey Spill Compensation Fund.

(b) The information required under this section and/or any other section of this subchapter may be combined and sent to the Division in a single transmittal. The DPCC and DCR plans required under sections 7:1E-4.4 and 7:1E-4.21 may be prepared and submitted as a single document, which can also include the information required by this section.

(c) The information required under this section shall be filed with the Division immediately by any owner or operator of an existing major facility which has not already done so, or prior to the operation of a new major facility.

(d) Any substantial changes in the information supplied under this section shall be reported to the Division within 30 days.

(e) The information required under this section and any other section of this subchapter shall be sent to:

Department of Environmental Protection
Division of Water Resources
P.O. Box 2809
Trenton, New Jersey 08625
ATTENTION: Spill Prevention

7:1E-4.4 Preparation and Submission of Plans

(a) The owner or operator of a major facility shall prepare a Discharge Prevention, Containment or Countermeasure (DPCC) Plan and a Discharge Cleanup and Removal (DCR) Plan in accordance with Sections 7:1E-4.4 and 7:1E-4.22. The DPCC and DCR Plans may be prepared and submitted to the Division as a single document.

(b) The owner or operator of an existing major facility shall submit a DPCC Plan and a DCR Plan to the Division within one year after the effective date of this section, unless time is extended for good cause shown. Unless time is extended by the Division, such additional information as the Division may

require shall be submitted within thirty days of receipt of the Division's request. Implementation of the DPCC and DCR Plans shall begin as soon as possible, but not later than one year after the Division's approval. The owner or operator shall make a good faith effort to submit an acceptable plan to the Division within one year after the effective date of this section. The Division shall act to approve or deny approval of a complete submission of a DPCC and/or DCR Plan within 90 days of receipt.

(c) The owner or operator of a new major facility shall submit a DPCC Plan and a DCR Plan to the Divison at least three months prior to the anticipated operational date of the facility, and shall implement the approved plans prior to operating the facility.

(d) Plans requiring construction of engineering works shall be certified to and sealed by a licensed professional engineer pursuant to N.J.S.A. 45:8-27 and 28. The Division shall not require certification to the installation of packaged facilities, discharge containment and cleanup equipment, minor construction or repiping.

(e) If Plans call for facilities, procedures, methods or equipment not yet fully operational, these items shall be listed separately and a schedule for installation and operational status shall be provided. Approval of the DPCC or DCR Plan may be conditioned on making such items operational on a schedule acceptable to the Division.

(f) The Division shall review DPCC and DCR Plans for conformance with the standards of this Subchapter. The Division shall state in writing its reasons for denying approval of a plan or portion thereof.

(g) If the Division finds a Plan to be incomplete or denies its approval of a Plan, the owner or operator shall have three months within which to submit an acceptable Plan, unless the Division extends the time for good cause shown.

(h) Two copies of a DPCC or DCR Plan shall be submitted to the Division for approval. Copies shall be sent to:

Department of Environmental Protection
Division of Water Resources
P.O. Box 2809
Trenton, New Jersey 08625
ATTENTION: Spill Prevention

(i) The Division may inspect major facilities prior to approving DPCC or DCR Plans and at reasonable times thereafter in order to ascertain compliance with the plans. The Division shall give adequate notice to the

owner or operator prior to making any inspection, unless such notice could reasonably be expected to result in concealment of a violation.

7:1E-4.5 Discharge Prevention, Containment and Countermeasure (DPCC) Plans

(a) The DPCC Plan shall be prepared in accordance with good engineering practices and employ the best practicable technology, and shall have the full approval of management at a level with authority to commit the necessary resources.

(b) The DPCC Plan shall contain the following information:

1. Name and location of the facility.

2. Name(s) of the owner or operator of the facility.

3. Name and address of the owner or operator's registered agent.

4. General site plan of the facility, showing the locations of bulk storage tanks (buried and aboveground), drum storage areas, process buildings, regularly used transfer areas, and any other structures in or on which hazardous substances are stored or handled, or which are used for the prevention of discharges of hazardous substances.

5. Drainage plans of the facility, including the location of all major sewers, storm sewers and all watercourses into which surface water runoff from the facility drains.

6. Anticipated date on which the facility will become operational, if the facility is a new one.

(c) If the facility has experienced two or more reportable discharge events within the previous twelve months, the DPCC Plan shall include a description of each such event, corrective action taken, and plans for preventing recurrences.

(d) The DPCC Plan, in addition to the above requirements, shall contain a brief description of the facility's approach to compliance with the standards of sections 7:1E-4.6 through 7:1E-4.21 of these regulations.

(e) In addition to the general site plan which must be submitted to the Division as part of the DPCC Plan pursuant to paragraph (b) 4, the owner or operator shall maintain at the facility or other location reasonably proximate thereto, detailed plans of the facility, including locations of bulk

storage tanks, drum storage areas, pipes, process buildings, transfer areas, secondary containment systems and drainage works. The owner or operator shall afford to the Department access to such plans during normal business hours, upon prior notice, and at any time when a discharge incident or imminent discharge necessitates consulting the plans. The DPCC Plan shall indicate where such plans are kept and the methods whereby the Department may gain access to them during business hours and at all other times in case of an emergency.

7:1E-4.6 Discharge Prevention - Policy

(a) This Subchapter shall be construed in light of the policies expressed in this section.

(b) The purpose of the Department's discharge prevention regulations is to encourage, and in certain respects to require, design and maintenance standards at major facilities that will ensure against discharges of hazardous substances.

(c) New major facilities and new construction at existing major facilities will be required to meet the standards of this Subchapter. Existing major facilities will be required to meet the standards of this Subchapter with the following exceptions and exemptions:

(1) Existing major facilities shall be exempt from such portions of these regulations as particularly specified herein.

(2) The Department shall exempt an existing major facility from any portion of these regulations if the owner or operator demonstrates that meeting a particular requirement would be impracticable or would not substantially contribute to prevention of discharges.

(3) The Department shall upon request grant an existing major facility a reasonable period of time, in light of all circumstances including economic feasibility, to upgrade to meet the standards of these regulations where required to do so.

The Department shall state in writing its reasons for granting or denying any exemption. The Department may require of any major facility which has been exempted from any requirement of these regulations the installation of alternative prevention and/or detection devices such as alarms, so as to minimize the chances of a discharge, and may, in addition, require the owner or operator of such major facility to demonstrate an enhanced ability to prevent expeditiously contain and/or clean up and remove a discharge from the portion of the facility to which an exemption has been granted.

(d) Whenever an existing major facility is exempted from any requirement of these regulations, the facility, so far as is practicable, shall be upgraded over time to meet the standards required of new facilities. The rate of such upgrading shall be proposed by the owner or operator and be subject to review and approval by the Department. The Department shall not require the reconstruction or replacement of any existing structure except as that structure requires substantial reconstructure or replacement in the normal course of use, unless the Department can show that the structure presents an imminent threat of causing a discharge. To the extent that retirement of existing equipment or portions of a major facility can be predicted, the DPCC Plan shall include a schedule for upgrading that equipment or portion of the facility to new facility standards. The Plan shall also include a description of those portions or aspects of the major facility that cannot be practicably upgraded over time, and the reasons therefor.

(e) The Department recognizes that the designs of major facilities differ, and that therefore appropriate methods of discharge prevention are necessarily site-specific. It is the intention of the Department that the owners and operators of major facilities have the greatest possible freedom to design and operate their facilities as they wish, consistent with these regulations. Wherever in these regulations a particular method of discharge prevention is mandated, the owner or operator of a major facility may substitute an alternate method if he can demonstrate to the satisfaction of the Department that such alternate method will provide protection against discharges reasonably equivalent to, or better than, the method it is intended to displace. If the Department requires the installation of alternative prevention and/or detection devices as mentioned in subsection (c), the owner or operator shall propose the devices to be used, subject to the Department's approval.

7:1E-4.7 Facility Drainage and Secondary Containment

(a) To the maximum extent practicable, all portions or areas of a major facility in which hazardous substances are routinely stored, processed, or transferred shall be designed so that the largest probable spill will be prevented from flowing, draining or leaching into the waters of the State.

(b) Appropriate secondary containment and/or diversionary structures to prevent spilled hazardous substances from reaching waters of the State may include any of the following or their equivalents:

(1) Dikes, berms or retaining wall sufficiently impervious to contain spilled hazardous subtances;

(2) Curbing;

(3) Gutters, Culverts and other drainage systems;

(4) Weirs, booms and other barriers;

(5) Diversion ponds, lagoons, retention basins, holding tanks, sumps, slop tanks and other collecting systems;

(6) Drip pans;

(7) Other means as approved by the Department.

(c) To be considered adequate, secondary containment and/or diversionary systems, structures or equipment must meet the following standards:

(1) The system must block all probable routes by which spilled hazardous substances could reasonably be expected to flow, migrate or escape into waters of the State, from within the contained area.

(2) The system must have sufficient capacity to contain or divert the largest probable single spill that could occur within the containment area, plus an additional capacity to compensate for any anticipated normal accumulation of rainwater.

(3) In order to prevent the discharge of hazardous substances into ground water, all components of the system shall be made of or lined with impermeable materials. Such material or liner must be maintained in an impermeable condition.

(4) No process area, transfer area, diked storage area or other storage area, or secondary containment/diversion system appurtenant thereto shall drain into a watercourse, or into a ditch, sewer, pipe or storm drain that leads directly or indirectly into a watercourse or public sewage treatment plant, unless:

A. provision is made to retain, by valves or other positive means, any accumulated rainwater until its condition can be ascertained, or

B. provision has been made to intercept any spilled hazardous substances in an approved industrial wastewater treatment or pretreatment facility, or other approved facility.

(5) Catchment basins, lagoons, etc., should not be located in a manner that would subject them to flooding.

(6) Incompatible materials shall not be stored within the same containment area if there is a substantial likelihood of them mixing in the event of spillage. "Incompatible" materials are those which, if mixed, will create hazards

greater than those posed by the individual substances alone, such as fire, explosion, or generation of toxic fumes. This restriction does not apply to process areas where the substances are brought into proximity as part of a production process.

(7) Provision shall be made for removing spilled hazardous substances from a secondary containment or diversion system. The permissible time period for removal depends on the hazard posed by the spill. Secondary containment systems shall not be used as backup product storage systems nor for any other purpose that would impair their capacity to contain spills. The DPCC Plan shall include an estimate of the time required to remove the largest probable spill from any secondary containment system.

7:1E-4.8 Housekeeping, Maintenance, Inspections and Records

(a) Hazardous substances shall be kept in containers suitable for their storage or processing at all times except when being transferred between containers. Containers shall be compatible with the substances stored therein and resistant to chemical attack by the substances. Hazardous substances shall be kept protected from the elements and from spillage.

(b) Tanks, pipes, valves, glands, drums, or other equipment leaking hazardous substance shall be promptly repaired, replaced or taken out of use following detection of a leak.

(c) Spills of hazardous substances that may seep, flow, drain or be washed, blown or carried into waters of the State, including ground water, shall be promptly cleaned up.

(d) Loose quantities of hazardous substances shall not be allowed to persist on grounds, floors, walls or equipment, or on other places within the faciity where they may seep, flow, drain or be washed, blown or carried into waters of the State.

(e) The facility should keep on hand, in convenient locations, adequate quantities of sorbent materials, chemical neutralizing agents and/or other materials as needed, sufficient to contain and clean up such small spills as may be expected to occur in the ordinary operations of the facility.

(f) An adequate supply of protective safety equipment, such as rubberized coveralls, boots, gas masks, etc., shall be maintained at the facility in convenient locations for use by any personnel who are required to clean up spilled hazardous substances. Where such equipment is required by any regulation of the Occupational Safety and Health Administration (OSHA), compliance with such regulation shall be deemed to fulfill the requirements of this subsection.

(g) Secondary containment systems shall be maintained in good repair, free of cracks through which hazardous substances could escape. Such systems shall be inspected at regular intervals, at least once a year.

(h) Flexible hoselines which are used to transfer hazardous substances shall be visually inspected prior to each use. Visibly damaged, deteriorated, or discarded hoses shall be immediately taken out of service and removed from the work area.

(i) The owner or operator of a major facility shall carry out a regular program of inspections designed to detect spills and potential equipment failures. Such a program shall include all tests specifically required by any applicable section of this subchapter. The DPCC Plan shall include a detailed description of the inspection program. Records of inspections and tests which are made under the inspection program, shall be maintained by the owner or operator for a period of three years and shall be available to the Department for inspection during business hours.

7:1E-4.9 Detection of Discharges to Ground Water

(a) Unless a leak is likely to be detected by personnel, product gauging or an automatic leak detection system, the owner or operator of a major facility shall install observation wells reaching the water table in proximity to any potential source of a discharge into ground water, in locations estimated to give the best probability of detecting leaks from the source.

(b) If a major facility is required to install observation wells pursuant to subsection (a), the Department shall require at least one observation well be installed but not more than the lesser of --

(1) one well per acre, or

(2) one well per each individual potential source.

(c) The owner or operator of a major facility shall submit as part of the DPCC Plan a plan showing the proposed locations of observation wells and ground water leak detection systems where such installations are required. The Department shall review this proposal and may require the installations be in different locations.

(d) The owner or operator shall sample observation wells and analyse the samples at least once quarterly for parameters acceptable to the Department which will indicate the probable presence in ground water of the hazardous substance(s) stored in or conveyed through the potential source. Records of these

analyses shall be maintained by the owner or operator for a period of 3 years, and shall be available for inspection by the Department during regular business hours.

(e) If sampling indicates the probable presence in ground water of a hazardous substance discharged after installation of the wells, the owner or operator shall immediately report the fact to the Division. The Division may thereafter require additional sampling and analyses to determine the particular hazardous substance and whether it was discharged from the major facility.

(f) Upon first installing observation wells where required, the owner or operator shall obtain samples and analyses thereof to establish baseline levels for the hazardous substance(s) which the well is intended to detect. Results of these analyses shall be submitted to the Division along with location maps and boring logs.

(g) The owner or operator of a major facility shall afford to the Department access to ground water observation wells for the purpose of taking samples therefrom during regular business hours, and at other times upon adequate notice or immediately in an emergency situation.

7:1E-4.10 Flood Hazard Areas

(a) Hazardous substances stored within the 100-year flood plain of any watercourse as delineated by the Department shall be protected against being carried off by or being discharged into flood waters.

(b) Hazardous substances stored within any area known by the owner or operator to be subject to a high probability of flooding shall be likewise protected.

(c) The DPCC Plan shall describe how such protection is to be achieved.

7:1E-4.11 Security

(a) All major facilities should be adequately fenced (fully fenced on land) with entrance gates locked and/or guarded when the facility is unattended, and either guarded or under observation by personnel at all other times.

(b) Valves which will permit escape of a tank's or other container's contents to the surface should be securely locked in the closed position when in non-operating or non-standby status.

(c) Starter controls on all pumps should be locked in the "off" position when the pumps are in non-operating or non-

standby status unless the controls are located at a site accessible only to authorized personnel, which site is itself attended or locked.

(d) The manifolds of all pipes should be securely capped or securely blank-flanged when not in service or standby service for an extended time.

(e) Major facilities should be adequately illuminated in operating areas so that personnel on the premises can detect intruders or spills during hours of darkness.

(f) If the major facility is not adequately fenced and secured as described in paragraph (a) of this section, the requirements of paragraphs (b), (c) and (d) shall be considered mandatory.

7:1E-4.12 Personnel Training

(a) Owners or operators shall implement an appropriate program for training their personnel involved in the handling of hazardous substances, in the proper techniques for handling the substances stored, processed, or transferred in the facility; in the operation and maintenance of equipment to prevent spills and discharges, and in the procedures to be followed in the event of a spill or dishcarge.

(b) Each major facility shall have a designated person with authority to act who is responsible for discharge prevention.

(c) Briefings, training sessions, courses and other educational efforts shall be conducted often enough to ensure that every employee involved in hazardous substance operations is given an adequate understanding of the discharge prevention plan for the facility and the procedures to be followed in the event of a spill or discharge, including the procedures for notifying line management and the Department. At a minimum, every employee involved in hazardous substance operations shall be given such instruction at the commencement of employment in the facility.

7:1E-4.13 Containment Equipment

If a major facility handles oil or other non-miscible lighter-than-water hazardous substances, and the facility is adjacent to, or sufficiently near a body of surface water such that a spill from the facility would be reasonably expected to reach the water, the facility shall maintain or have available from a nearby stockpile an adequate length of flotation boom and/or filter fences and/or sorbent materials sufficient to contain and prevent the further spread of discharges.

7:1E-4.14 Petroleum and Hazardous Substance Bulk Storage Tanks

(a) Above-Ground Tanks

(1) Above-ground bulk storage tank installations shall be provided with an adequate means of secondary containment, designed and built in accordance with good engineering practice, capable of effectively holding the entire contents of the largest single tank contained, and having sufficient additional capacity to accommodate accumulated precipitation and to provide a reasonable margin of safety in the event of a tank failure.

(2) The secondary containment system shall conform to the standards set forth in N.J.A.C. 7:1E-4.7, and of 40 C.F.R. 112 where applicable.

(3) The area beneath bulk storage tanks shall be made of or surfaced with a material sufficiently impermeable to passage and/or chemical attack by the stored substances as to prevent passage into ground water by the substances under the conditions of storage prevailing within the tank. Existing bulk storage tanks shall be exempted from this requirement until such time as they may require substantial reconstruction or replacement in the normal course of use.

(4) Pipes leading to and from above-ground tanks, which enter the tank below the liquid level, shall be equipped with valves sufficiently close to the tank that they can prevent the contents of the tank from escaping outside the secondary containment area in the event of a pipe rupture outside the containment area.

(5) Above-ground tanks shall be subjected to periodic integrity testing on a schedule which shall take into account the material of which the tank is constructed, the substances stored therein, soil conditions and other circumstances which affect tank life and the probability of leakage. Testing techniques shall take into account tank design. Acceptable methods include hydrostatic or other liquid-pressure testing, visual inspection or a system of non-destructive shell thickness testing. Where the last system is used, comparison records of shell thickness reduction shall be maintained throughout the life of the tank. Tank supports and foundations shall be inspected as well.

(b) Buried Bulk Storage Tanks

(1) Owners and operators of existing buried bulk storage tanks should consider installing the protection required of new facilities in order to minimize the likelihood of leaks or the consequences thereof.

(2) New buried bulk storage tanks shall be made of corrosion-resistant materials, or shall be protected from corrosion by coatings, cathodic protection or other effective methods compatible with local soil conditions.

(3) New buried bulk storage tanks shall be protected by product-sensitive detection devices implanted in the ground beneath and around the buried tanks, where such devices are available and their use is practicable.

(4) Existing buried bulk storage tanks, or new ones that cannot be protected by the means described above or by means affording equal or better protection, shall be provided with the best practicable means of leak detection, such as:

A. Careful gauging and recording of contents of buried tanks;

B. Flow detectors that will give alarm if level in tank is dropping when product is not being drawn off deliberately.

C. Observation wells.

(5) Buried bulk storage tanks shall be subjected to periodic integrity testing in a manner and on a schedule as specified in the DPCC plan. Hydrostatic or product pressure testing, (i.e. Kent-Moore type test) or an alternative method acceptable to the Division which reflects best practicable technology standards, shall be employed.

(c) Partially-Buried Metallic Tanks

New construction of partially buried metallic tanks is prohibited unless the owner or operator can demonstrate to the Department a need for such construction. If such a tank is built, the buried section shall be adequately coated and protected with cathodic protection and other safeguards specified by the Division.

(d) If a tank is served by internal heating coils, such coils, the pipes leading to and from them, and the facilities to which they connect, must be designed so that any leakage passing from the tank into the heating coil system will be captured and contained in a settling tank, skimmer or other secondary containment or wastewater treatment system.

(e) Tank installations should be equipped with fail-safe devices capable of detecting overfills and other types of spills, which devices can actuate valves or other shutdown mechanisms, or which can summon human aid. Such devices include:

(1) high liquid level alarms with an audible or visual signal designed to alert plant personnel of overfills;

(2) high liquid level pump cutoff devices designed to stop flow at predetermined levels;

(3) direct communication between tank gauger and pumping station;

(4) fast response systems for determining liquid levels, such as visible gauges, digital computer links, etc.;

(5) interconnections between tanks so that overfills are directed into other tanks.

Use of devices such as the foregoing shall be at the owner or operator's option for tanks which are served by adequate secondary containment systems. For tanks which are not so served, the owner or operator shall specify in the DPCC Plan which fail-safe devices he proposes to employ in order to provide the maximum practicable degree of spill detection and prevention. The Department may approve alternative devices.

(f) Mobile or portable storage tanks shall be positioned or located so as to prevent spills therefrom from reaching surface waters. If such tanks are used for long term storage, they shall be protected by adequate secondary containment of sufficient capacity to contain or divert the contents of the largest single compartment or tank. Such tanks shall not be located in areas subject to periodic flooding or washout.

(g) Existing bulk storage tanks are hereby exempted from any requirement of 7:1E-4.14 compliance with which would necessitate substantial reconstruction or replacement of the tank. When substantial reconstruction or replacement of a tank, including relining, must be undertaken as the result of deterioration of the tank, or in the course of normal plant capital improvements, the tank installation shall be upgraded to comply with all requirements of this section.

7:1E-4.15 Tank Car and Tank Truck Loading/Unloading Areas

(a) All tank car and tank truck loading areas shall be designed such that a spill of the largest single compartment of any tank car or tank truck in the area will be prevented from entering any surface water body, sanitary sewer or storm drain, other than a drain which leads to an approved industrial wastewater treatment plant or other facility which will effectively contain the spilled hazardous substance.

(b) All tank car and tank truck loading areas employed in the transfer of hazardous substances should be equipped in the area of transfer with a secondary containment system of sufficient capacity to contain or divert the volume of the largest single compartment of any tank car or tank truck loaded or unloaded in the area. Such a secondary containment system may include any or all of the following, or any other device or method suitable for the purpose:

(1) containment curbing,

(2) trenching system and catchment basin,

(3) drainage to separator or approved industrial wastewater treatment facility.

(c) All tank car and tank truck loading/unloading areas should be paved or surfaced in the area of transfer with impermeable materials.

(d) Prior to filling or departure of any tank car or tank truck, the lowermost drain and all outlets of such vehicles shall be closely examined for leakage and if necessary tightened, adjusted, repaired or replaced so as to prevent liquid leakage in transit. All manifolds on tank cars or tank trucks shall be flanged or capped, and valves secured, prior to leaving transfer areas.

(e) An interlocked warning light or physical barrier system should be provided in transfer areas to prevent vehicle departure before complete disconnect of flexible or fixed transfer lines.

(f) Tank cars or tank trucks in the process of being loaded or unloaded should be attended at all times during the procedure.

7:1E-4.16 Drum Storage For Hazardous Substances

Drum storage areas, including docks where drums are stored, shall be served by adequate secondary containment systems.

7:1E-4.17 Process Areas For Hazardous Substances

(a) Drainage from production facilities, including buildings, and other process areas shall be so engineered as to provide a means of secondary containment for spilled hazardous substances.

(b) Process wastewater and cooling water pipes, plant drains and similar installations which drain into sewers, storm drains, public wastewater treatment plans, watercourses or other routes which drain to waters of the State shall be engineered so that probable spills of hazardous substances will not escape through them to waters of the State. If hazardous substances captured in secondary containment systems will drain into process wastewater lines, provision must be made to treat or remove the hazardous substances before the water is discharged.

7:1E-4.18 In-facility Pipes for Hazardous Substances

(a) Where practicable, each in-facility pipe should be marked by lettering, color banding or color coding to indicate the product transferred through it.

(b) Because of the potential for undetected spills, pipes should not be buried unless necessary. Wherever practicable exposed pipe corridors or galleries should be employed in preference to burial.

(c) New buried piping installations shall be protectively wrapped and coated or cathodically protected if soil conditions warrant and the pipe is of corrodable material.

(d) Buried pipes shall be equipped with product-sensitive leak detection devices, if such devices represent best practicable technology.

(e) If a section of buried pipe is exposed for any reason, it shall be carefully examined for deterioration, and if found to be deteriorated, shall be repaired or replaced. Existing pipes which require repair or replacement shall be upgraded to the standards applicable to new installations.

(f) Pipes removed from service for extended periods of time shall be capped or blank-flanged and marked as to origin.

(g) Pipe supports should be designed so as to minimize abrasion and corrosion and allow for expansion and contraction. Wood-to-metal contacts should be avoided.

(h) If in-facility pipes are elevated across roadways, gate check-in procedures, warning signs and/or other means shall be used to minimize the chance of a vehicular collision with the pipes.

7:1E-4.19 Transmission Pipelines

(a) Transmission pipelines shall conform to all applicable regulations of the U.S. Department of Transportation, in particular, 49 CFR Part 195, "Transportation of Liquids by Pipeline."

(b) Pipelines shall be equipped with sensing devices which will automatically shut off flow if a leak is detected.

(c) New buried pipelines shall be protectively wrapped and coated and/or cathodically protected if soil conditions warrant and the pipeline is of corrodable material.

(d) If a section of buried pipeline is exposed for any reason, it shall be carefully examined for deterioration, and if found to be deteriorated, shall be repaired or replaced. Existing pipelines which require repair or replacement shall be upgraded to the standards applicable to new buried pipelines.

(e) Shutoff valves capable of activation by remote control from the pipeline's operating control center shall be installed on each side of any reservoir holding water for human consumption which the pipeline crosses or is sufficiently near that a rupture of the pipeline would result in a discharge to the reservoir.

(f) In addition to the other requirements of this subchapter, the owner or operator of a transmission pipeline shall file with the Division a map of the transmission pipeline in New Jersey. The map shall be filed along with the DPCC Plan unless the map has been previously submitted to the Division. The map shall include the following information:

(1) Size of pipe

(2) Age of pipeline sections

(3) Locations of valves

(4) Locations of breakout tankage

(5) Locations of pumps

(6) Stream crossings (not including intermittent streams)

(7) Indication of operating pressure

(8) Location of flow recording devices

(9) Maximum design pressure

(10) Major road crossings

(11) Periods of use (if continuous so indicate)

(12) Products to be carried through the pipeline

(13) Scale

(14) Date of map

7:1E-4.20 Marine Transfer Facilities

(a) All regulations of the U.S. Coast Guard which apply to oil transfer facilities (in particular, 33 CFR 154 and 33 CFR Part 156) are herein expressly adopted by reference, and are further made applicable as well to all marine transfer facilities which transfer in the liquid state any hazardous substances other than oil.

(b) If oil and other non-miscible lighter-than-water hazardous substances re transferred at the facility, there shall be kept available for immediate deployment in the event of a discharge, a length of flotation boom sufficient to contain probable discharges of hazardous substances, based on the rate at which substances are transferred and the volume of substances which are likely to be discharged before boom can be positioned.

(c) Transfer operations should not be commenced, or if commenced should be discontinued, under the following conditions:

(1) If weather forecasts predict for the vicinity of the facility that winds will reach gale force, or that heavy rain, sleet, snow or other storm conditions will substantially reduce visibility or otherwise increase the risk of discharges, or if such severe weather conditions occur after transfer operations have been commenced.

(2) If fire occurs in the vicinity of the transfer operation or a nearby portion of the transfer facility.

(3) If at any time the transfer system is functioning contrary to the intended operating procedures of the facility.

(4) If a break occurs in the transfer system.

(5) If there is an apparent discrepancy in the quantity of hazardous substance transferred.

(6) If the communication system is not operative.

(7) If hazardous substances are observed in the water near any transfer component.

(8) If a reportable discharge of hazardous substance occurs during transfer. Transfer should not be resumed until after the discharge has been reported to the Department and the Department is satisfied that adequate steps have been taken to contain the discharge and to prevent further discharges.

7:1E-4.21 Discharge Cleanup and Removal Plan

(a) The owner or operator of a major facility shall prepare and implement a Discharge Cleanup and Removal (DCR) Plan containing the following information:

(1) A list of containment and removal equipment to which the facility has access through ownership, contract or other means, including but not limited to vehicles, vessels, pumps, skimmers, booms, chemicals, and communications devices. If access to equipment is by contract with or membership in a discharge cleanup organization which had filed information with the Division pursuant to N.J.A.C. 7:1E-3.1, it is sufficient to supply the name of the organization in lieu of an equipment list;

(2) List of the trained personnel who are available to operate such equipment and a brief description of their qualifications;

(3) The terms of agreement and operation plan of any discharge cleanup organization of which the owner or operator of the facility is a member;

(4) Procedures for notifying management, government agencies and cleanup personnel or contractors in the event of a discharge;

(5) Procedures for mobilizing equipment and personnel for initiating containment and cleanup, and an estimate of the maximum response time required to initiate containment and/or cleanup of discharge of varying size up to the largest probable discharge that could occur at the facility;

(6) Description of a training program for those personnel assigned to any aspect of discharge response;

(7) Names, titles and 24-hour telephone numbers of persons authorized to hire contractors and release funds for discharge response, containment, cleanup and removal.

(8) Proposed methods of disposal and disposal sites for hazardous substances or contaminated soil, debris, etc., gathered during cleanup and removal operations.

(b) Each major facility shall have available to it, by ownership or by arrangement with a discharge cleanup organization which has submitted to the Department the information required by N.J.A.C. 7:1E-3.2, adequate equipment and personnel to clean up the largest probable discharge that could occur at the facility.

7:1E-4.22 Amendment of Plans by Owners or Operators

(a) The owner or operator of a major facility having an approved DPCC or DCR Plan shall report to the Division any change in facility design, construction, operation or maintenance which will materially affect the facility's potential for discharges of hazardous substances or the substance of existing plans. The owner or operator shall amend the DPCC and/or DCR Plan to reflect such changes, and shall submit such amendments to the Division for approval.

(b) The Division shall act on proposed amendments within 30 days. If the Division fails to approve or reject the proposed amendment within that time, it shall be deemed approved.

(c) Amendments to DPCC or DCR Plans shall be implemented as soon as possible, according to a schedule submitted by the owner or operator and approved by the Division.

(d) Notwithstanding compliance with paragraph (a) of this section, the owner or operator shall complete a review and evaluation of the DPCC and DCR Plans at least once every three years. As a result of this review and evaluation, the owner operator shall amend the Plans within six months of the review to include more effective prevention and control technology if:

(1) Such technology will significantly reduce the likelihood of a discharge from the facility;

(2) Such technology has been field-proven at the time of the review, and

(3) The technology can be installed at a reasonable cost.

The review and evaluation required by this paragraph can be conducted concurrently with the review required by 40 CFR 112.5.

7:1E-4.23 Amendment of Plans Following Discharge

(a) Within 60 days after any reportable discharge at a major facility, the owner or operator thereof shall submit to the Division the following information:

(1) A full report of the discharge incident, including the cause(s) of the discharge and a failure analysis

(2) The corrective actions and/or countermeasures taken, including a description of equipment repairs and/or replacements;

(3) Additional preventive measures taken or proposed to minimize the possibility of recurrence;

(4) Such other information as the Division may reasonably require pertinent to discharge event or the DPCC or DCR Plan.

(5) A copy of the draft of any DPCC or DCR Plan, if the Plans have not previously been submitted to the Division.

(b) A copy of the information required to be sent to the Regional Administrator, U.S. Environmental Protection Agency, pursuant to 40 CFR 112.4 shall be deemed to satisfy the requirements of paragraph (a) of this section.

(c) Following submission of the information required by paragraph (a) of this section, the Division may review the major facility's DPCC and DCR Plans and may require the owner or operator of the facility to amend the Plans if it finds that a Plan does not meet the requirements of this subchapter or that amendment of the Plan is necessary to prevent and contain similar discharges from the facility.

(d) If the facility is one to which the requirements of 40 CFR 112.4 are applicable, the Division shall make recommendations to the Regional Administrator and shall stay any direct action to demand amendment of Plans until after the Regional Administrator has had reasonable time to act, or to decline to act, under 40 CFR 112.4(d). If the Regional Administrator, pursuant to the Division's recommendations, proposes to require an amendment to the facility's SPCC Plan, the Division shall further stay any direct action pending the conclusion of the procedures provided for in 40 CFR 112.4(e) and (f). Thereafter the Division may act to require the owner or operator of the major facility to amend DPCC or DCR Plans in any manner allowed under these regulations and not inconsistent with any requirements imposed by the Regional Administrator.

(e) Amendments required by the Division shall become part of the DPCC or DCR Plan within 30 days after approval by the Division, unless the Division shall specify another effective date. The owner or operator shall implement the amendment of the plan as soon as possible, according to a schedule approved by the Division.

7:1E-4.24 Denial or Revocation of Approval of DPCC or DCR Plans or Amendments; Appeals

(a) The Division shall state in writing its reasons for denying or revoking approval of any DPCC or DCR Plans or amendments thereto.

(b) The Division may revoke its approval of a DPCC or DCR Plan if the owner or operator fails to comply with an approved schedule for bringing his Plan into compliance with the requirements of these regulations, or fails to fulfill any condition of an approval, or submits to the Division false or wilfully misleading information.

(c) The owner or operator of a major facility who is aggrieved by any decision of the Division to deny or revoke approval of a DPCC or DCR Plan or any amendment thereto has a right to a hearing before the Department.

(d) Any person so aggrieved may request a hearing by sending a written request to:

Office of Regulatory Affairs
New Jersey Department of Environmental Protection
Division of Water Resources
P.O. Box 2809
Trenton, New Jersey 08625

within 15 days of receipt of the Division's decision. Hearing requests shall be made in the form specified in N.J.A.C. 7:8-6.4.

(e) Hearings shall be conducted in accordance with the procedures for contested case hearings under the New Jersey Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., and the regulations of the Division thereunder, N.J.A.C. 7:8-6.1 et seq. The Division shall suspend its action pending the outcome of the hearing.