HEW JERSEY STATE LIERARY

CHAPTER 1E

DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES

Authority

N.J.S.A. 58:10-23.11, 58:10-23.11-1, 58:10-46 to 50 and 13:1K, specifically 13:1K-18, 58:10-23.11d6, d14 and f6 and 58:10-47.

Source and Effective Date

R.1991 d.465, effective September 3, 1991 (operative September 11, 1991). See: 23 N.J.R. 1335(a), 23 N.J.R. 2656(a).

Executive Order No. 66(1978) Expiration Date

Chapter 1E, Discharges of Petroleum and Other Hazardous Substances, expires on September 3, 1996.

Chapter Historical Note

Chapter 1E, Discharges of Petroleum and Other Hazardous Substances, became effective pursuant to the authority of N.J.S.A. 58:10–23.11 et seq., specifically 58:10–28.11t and N.J.S.A. 13:1D–1 et seq., specifically 13:1D–9, March 31, 1977, as R.1977 d.115. See: 9 N.J.R. 68(c), 9 N.J.R. 217(c). The provisions of the chapter were readopted as R.1985 d.377, effective July 15, 1985. See: 17 N.J.R. 865(a), 17 N.J.R. 1759(a). Pursuant to Executive Order No. 66(1978), Chapter 1E expired on July 15, 1990. The chapter was adopted as new rules, effective August 6, 1990. See: 22 N.J.R. 1657(a), 22 N.J.R. 2284(a). Public Notice: Notice to adopt rules concerning petroleum and other hazardous substances. See: 23 N.J.R. 2507(a). Subchapter 5, Hazardous Substance Discharge: Reports and Notices, was recodified from N.J.A.C. 7:1–7 by R.1990 d.457, effective September 17, 1990. See: 22 N.J.R. 1457(a), 22 N.J.R. 2965(a). Chapter 1E was repealed and adopted as new rules by R.1991 d.465, effective September 3, 1991 (operative September 11, 1991). See: Source and Effective Date.

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SUBCHAPTER 1. GENERAL PROVISIONS

7:1E-1.1 Scope

- (a) This chapter covers the discharge of hazardous substances as defined in this chapter, excepting those pursuant to and in compliance with the conditions of a valid and effective Federal or State permit. These rules set forth guidelines and procedures to be followed by all persons in the event of a discharge of a hazardous substance. They also set forth certain registration, reporting, design and maintenance requirements for owners and operators of major facilities and transmission pipelines which handle hazardous substances.
- (b) This subchapter prescribes the provisions that are generally applicable. The following shall govern how certain terms are defined for use in this chapter, which persons are subject to this chapter, and the Department's rights of access for determining compliance with this chapter and the Act.

Case Notes

Terms defined in Spill Compensation and Control Act regulations were not void for vagueness. In re Adoption of N.J.A.C. 7:1E, 255 N.J.Super. 469, 605 A.2d 733 (A.D.1992).

Spill Compensation and Control Act regulations which required reporting of discharges were constitutional. In re Adoption of N.J.A.C. 7:1E, 255 N.J.Super. 469, 605 A.2d 733 (A.D.1992).

Spill Compensation and Control Act regulations which did not specify discharge quantity were not unconstitutional on their face. In re Adoption of N.J.A.C. 7:1E, 255 N.J.Super. 469, 605 A.2d 733 (A.D.1992).

7:1E-1.2 Construction

- (a) These rules, being necessary to promote the public health and welfare, and to protect the environment, shall be liberally construed so as to permit the Department to discharge its statutory functions under the Act.
- (b) The Commissioner may amend or repeal this chapter in conformance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., and N.J.A.C. 1:30.

7:1E-1.3 Severability

If any section, subsection, provision, clause or portion of this chapter or the application thereof to any person or circumstance is adjudged invalid or unconstitutional by a court of competent jurisdiction, the remainder of this chapter and the application thereof to other persons or circumstances shall not be affected thereby, and shall remain in full force and effect.

7:1E-1.4 Relationship to Federal and State Law

These rules are not intended to and do not relieve any person of the duty to comply with all other applicable laws, ordinances, rules, regulations or orders of governmental authorities governing activities regulated hereunder, including rules or regulations of the New Jersey Department of Environmental Protection, New Jersey Department of the Treasury, and other appropriate State, Federal and local agencies.

Case Notes

The Environmental Cleanup Responsibility Act (ECRA) is not preempted by the provision of the Bankruptcy Code; debtor permitted to abandon property as burdensome and cease operations on other property to prevent continuing losses, without complying with ECRA. In the Matter of Borne Chemical Co., Inc., 54 B.R. 126 (Bkrtcy.Ct.N.J. 1984).

7:1E-1.5 State non-liability

(a) New Jersey State government is not liable for any damages arising from its actions or omissions relating to any plan, registration or map required pursuant to this chapter. No approval by the Department of any plan or of any cleanup and removal activities shall be a defense against liability for the discharge, nor shall it shift liability for the discharge to the Department.

(b) In the event of a discharge, the person responsible for the discharge shall be held liable to the extent determined by the Act.

7:1E-1.6 Definitions

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

"Aboveground storage tank" means any storage tank not defined as an underground storage tank.

"Act" means the Spill Compensation and Control Act, N.J.S.A. 58:10–23.11 et seq., as amended.

"Affiliate" means, with respect to any person, another person:

- 1. Who has a controlling interest in such person;
- 2. In whom such person has a controlling interest; or
- 3. Who is under common control with such person.

"Agent(s) or officer(s) of the municipality" means a duly authorized representative of the municipality or local board of health, including, but not limited to, a member of the police, fire, or public works department, public health officer, township engineer, zoning officer, director of emergency management, or environmental compliance officer.

"API" means the American Petroleum Institute.

"API 574" means the API's Recommended Practice 574, entitled "Inspection of Piping, Tubing, Valves and Fittings."

"API 653" means the API's Standard 653, entitled "Tank Inspection, Repair, Alteration and Reconstruction."

"ASME" means the American Society of Mechanical Engineers.

"ASME Section V" means ASME Boiler and Pressure Vessel Code Section V, entitled "Nondestructive Examination."

"ASME Section VIII" means ASME Boiler and Pressure Vessel Code Section VIII, entitled "Pressure Vessels."

"ASME Section X" means ASME Boiler and Pressure Vessel Code Section X, entitled "Fiberglass-Reinforced Plastic Pressure Vessels."

"Assertedly confidential information" means information which is the subject of a confidentiality claim, for which a confidentiality determination has not been made.

"ASTM" means the American Society of Testing and Materials.

"Broker" means any person who arranges for the transportation, treatment, storage or disposal of hazardous substances on behalf of another person.

"Bulk storage" means the holding of large quantities of substances.

"CFR" means the Code of Federal Regulations.

"Claimant" means any person who submits a confidentiality claim under this chapter.

"Class confidentiality determination" means a confidentiality determination made by the Department under N.J.A.C. 7:1E-8.9, for a class of information.

"Cleanup and removal activities" means actions to clean up or remove or attempt to clean up or remove a discharge of a hazardous substance or the source thereof, or to chemically neutralize the discharge, or 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, soils and other affected property, including wildlife and other natural resources.

"Cleanup and removal costs" means all costs associated with cleanup and removal activities incurred by the State, its political subdivisions or their agents or any person with written approval of the Department.

"Commissioner" means the Commissioner of the Department of Environmental Protection or the person designated to act on his or her behalf pursuant to an administrative order.

"Confidential copy" means a record (or copy thereof) submitted to or obtained by the Department, containing information which the claimant asserts is confidential information.

"Confidential information" means information which the Department determines to have satisfied all of the following substantive criteria:

- 1. The claimant has asserted a confidentiality claim with respect to the information, in compliance with the procedures required by N.J.A.C. 7:1E-7, and such confidentiality claim has not expired by its terms, been waived or withdrawn;
- 2. The claimant has shown that disclosure of the information would be likely to cause substantial damage either to the claimant's competitive position or to national security;
- 3. The claimant has taken reasonable measures to protect the confidentiality of the information, and intends to continue to take such measures:

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- 4. The information is not, and has not been, available or otherwise disclosed to other persons either by the claimant (except in a manner which protects the confidentiality of the information) or without the consent of the claimant (other than by subpoena or by discovery based on a showing of special need in a judicial proceeding, arbitration, or other proceeding in which the claimant was required to disclose the information to such other persons, as long as the information has not become available to persons not involved in the proceeding);
- 5. The information is not contained in materials which are routinely available to the general public, including without limitation initial and final orders in contested case adjudications, press releases, copies of speeches, pamphlets and educational materials;
- 6. The claimant has not waived the confidentiality claim for the information; and
- 7. No law, regulation (including, without limitation, N.J.A.C. 7:1E-8.10 or any other regulations of the Department), or order by a court or other tribunal of competent jurisdiction specifically requires disclosure of the information or provides that the information is not confidential information.

"Confidentiality claim" or "claim" means, with respect to information that a person is required either to submit to the Department or to allow the Department to obtain, a written request by such person that the Department treat such information as confidential information.

"Confidentiality determination" means a determination by the Department that assertedly confidential information is or is not confidential information.

"Containment" or "containment activities" means actions to limit or prevent the spread of a leak or discharge.

"Contract" means an agreement between the Department and a contractor, for which the Department has determined that it is necessary for the contractor to have access to confidential information to enable the contractor to perform the duties required by such agreement.

"Contractor" means a person, other than an employee of the Department, who has entered into an agreement with the Department to perform services or to provide goods for the Department.

"Controlling interest" means any of the following:

1. The direct or indirect beneficial ownership, by the person asserted to have a controlling interest and any of such person's affiliates, of at least 50 percent of the voting stock or other equity interest in a person;

- 2. The holding of any direct or indirect beneficial interest, by the person asserted to have a controlling interest in any of such person's affiliates, in at least 50 percent of the income or profits of a person; or
- 3. The existence of any other relationship between the person asserted to have a controlling interest and the person controlled, which relationship in fact constitutes control over the affairs of the person controlled.

"DCR plan" means the discharge cleanup and removal plan required under N.J.A.C. 7:1E-4.

"Department" means the New Jersey Department of Environmental Protection.

"Diligent inquiry" means:

- 1. Conducting a diligent search of all documents which are reasonably likely to contain information related to a possible discharge, which documents are in such person's possession, custody or control, or in the possession, custody or control of any other person from whom the person conducting the search has legal right to obtain such documents; and
- 2. Making reasonable inquiries of current and former employees and agents whose duties include or included any responsibility for hazardous substances, and any other current and former employees or agents who may have knowledge or documents relevant to a discharge.

"Discharge" means any intentional or unintentional action or omission, unless pursuant to and in compliance with a valid and effective Federal or State permit, resulting in the releasing, spilling, pumping, pouring, emitting, emptying or dumping of a hazardous substance into the waters or onto the lands of the State or into waters outside the jurisdiction of the State when damage may result to the lands, waters or natural resources within the jurisdiction of the State. This term does not include "leak."

"Discharge cleanup organization" means an organization or association that engages in or intends to engage in cleanup and removal activities.

"Discharge monitoring device" means any equipment or instrumentation that is used to detect discharges at the facility.

"Double-walled piping" means piping which consists of one pipe fixed inside another, with an annular space between.

"DPCC plan" means the discharge prevention, containment and countermeasure plan required under N.J.A.C. 7:1E-4.

"Environmentally sensitive areas" means, for the purposes of planning for discharge control and mitigation, geographic areas which contain one or more significant natural or ecological resources as set forth in N.J.A.C. 7:1E-1.8.

"EPA" means the U.S. Environmental Protection Agency.

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

"Final public copy" means a copy of a record submitted to or obtained by the Department, identical to the confidential copy except that any confidential information has been blacked out; provided, however, that if the record is not in a form in which confidential information can be concealed by blacking out, the "final public copy" shall be a copy of such record from which such confidential information has been deleted, containing notations stating where deletions have been made.

"Guarantor" means a person who:

- 1. Possesses a controlling interest in the owner or operator;
- 2. Possesses a controlling interest in a person who possesses a controlling interest in the owner or operator;
- 3. Is controlled by a common parent firm that possesses a controlling interest in the owner or operator; or
- 4. Is engaged in a substantial business relationship with the owner or operator and issues the guarantee as an act incident to that business relationship.

"Handling" means treating, dealing with, or managing.

"Hazardous substances" means petroleum, petroleum products, pesticides, solvents and other substances as set forth in N.J.A.C. 7:1E-1.7.

"Impermeable" means utilizing a layer of natural or manmade material of sufficient thickness, density and composition so as to have a maximum permeability for the hazardous substance being contained of 10^{-7} centimeters per second at the maximum anticipated hydrostatic pressure.

"Incompatible materials" means those substances which, if mixed, will create hazards greater than those posed by the individual substances alone, such as fire, explosion, or generation of toxic fumes.

"Integrity testing" means a method of testing structures where either hydrostatic testing using water or other liquid or pneumatic testing is done in combination with a system of nondestructive testing which includes shell thickness testing. The nondestructive testing procedures shall be adequate to detect cracks, leaks, and corrosion, erosion or other wall thinning to less than a predetermined minimum thickness to ensure sufficient structural strength. Nondestructive

integrity test techniques include magnetic particle tests, acoustic emission tests, electromagnetic particle or eddy current tests, radiography and radiation tests, liquid penetrant tests, or ultrasonic tests.

"Leak" or "leakage" means any escape of a hazardous substance from the ordinary containers employed in the normal course of storage, transfer, processing or use into a secondary containment or diversion system or onto a surface from which it is cleaned up and removed prior to its escape into the waters or onto the lands of the State.

"Liquid" means having a viscosity between 0.2 centipoise and 3000 centipoise inclusive at one atmosphere (760.0 millimeters of mercury) pressure and temperatures between -20 and 120 degrees Fahrenheit (-29 and 49 degrees centigrade).

"Major facility" means all facilities, located on one or more contiguous or adjacent properties owned or operated by the same person, having total combined storage capacity of:

- 1. 20,000 gallons or more for hazardous substances other than petroleum or petroleum products;
- 2. 200,000 gallons or more for hazardous substances of all kinds; or
- 3. 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 not commonly measured by volume;
- 4. A vessel shall be considered a major facility only when hazardous substances are transferred between vessels. A "transmission pipeline" is not a major facility.

"Major leak" means an accident required to be reported pursuant to 49 CFR 195.50.

"Major maintenance" means maintenance required to correct any condition which is of such a nature that it presents an immediate hazard to persons or property.

"Major repair" means repairs necessary because of a major leak or major maintenance.

"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.

"NJPDES permit" means a permit or permit-by-rule issued by the Department pursuant to N.J.A.C. 7:14A.

"Nonmiscible lighter-than-water" means having a density less than water and not mixing with water to an appreciable degree.

"NPDES permit" means a permit or permit-by-rule issued by EPA pursuant to 40 CFR 122.

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"Owner or operator" means any person who, with respect to:

- 1. A vessel, owns, operates or charters by demise such vessel;
- 2. Any facility, owns such facility, or operates it by lease, contract or other form of agreement; and
- 3. Abandoned or derelict facilities, owned or operated such facility immediately prior to such abandonment, or the owner at the time of the discharge.

"Paved or surfaced" means to cover with concrete, tile, stones or the like, to create a level, stable, impermeable surface.

"Person" means public or private corporations, companies, associations, societies, firms, partnerships, joint stock companies, as well as individuals, and when used to designate the owner of property which may be subject to this chapter, includes this State, the United States, any other state of the United States, and any foreign country or government, and any political subdivisions or agents, lawfully owning or possessing property in this State.

"Person responsible for a discharge" means:

- 1. Any person whose act or omission results or has resulted in a discharge;
- 2. Each owner or operator of any facility, vehicle or vessel from which a discharge has occurred;
- 3. Any person who owns or controls any hazardous substance which is discharged;
- 4. Any person who has directly or indirectly caused a discharge;
- 5. Any person who has allowed a discharge to occur; or
- 6. Any person who brokers, generates or transports the hazardous substance discharged.

"Petroleum" or "petroleum products" means any bituminous liquid that is essentially a complex mixture of hydrocarbons of different types with small amounts of other substances, such as compounds of oxygen, sulfur or nitrogen, or metallic compounds, or any of the useful liquid products obtained from such a liquid by various refining processes, such as fractional distillation, cracking, catalytic reforming, alkylation and polymerization. This term shall include, but not be limited to, gasoline, kerosene, fuel oil, oil sludge, oil refuse, oil mixed with other wastes, crude oils, and hazardous substances listed in Appendix A which are to be used in the refining or blending of crude petroleum or petroleum stock in this State.

"Preliminary public copy" means a copy of a record held by the Department, identical to the confidential copy except that any assertedly confidential information has been blacked out; provided, however, that if the record is not in a form in which confidential information can be concealed by blacking out, the "preliminary public copy" shall be a copy of such record from which such confidential information has been deleted, containing notations stating where deletions have been made.

"Process area" or "production facility" means an area employed in production in which an action, operation or treatment embracing chemical, industrial, manufacturing or processing factors, methods, or forms is carried out utilizing hazardous substances. These factors, methods or forms include, but are not limited to, batch or continuous chemical reactions, distillation, blending and mixing operations, refining and re-refining processes, and separation processes.

"Quality assurance" or "QA" means a system for integrating the quality of planning, quality assessment, and quality improvement efforts of various groups in an organization. In pollution measurement, quality assurance is concerned with all activities affecting the quality of the measurements, as well as establishment of methods and techniques to assure the quality of the measurements.

"Quality control" or "QC" means the application of standard operating procedures for obtaining prescribed standards of performance in a monitoring and measurement process.

"Radionuclide" means any substance listed in 40 CFR 302.4, Appendix B.

"Record" means any document, writing, photograph, sound or magnetic recording, drawing, or other similar thing by which information has been preserved and from which the information can be retrieved or copied.

"Regional Administrator" means the Regional Administrator of EPA for the Federal region which includes the State of New Jersey.

"Reservoir" means a receptacle or chamber which can be used for storing a fluid.

"Requester" means a person who has made a request to the Department to inspect or copy records which the Department possesses or controls.

"Response coordinator" means the individual at the major facility who is responsible for the management of the DPCC and DCR plans at the facility and who shall possess sufficient corporate authority and technical background to resolve issues relating to the execution of the DPCC and DCR plans based on information provided by manufacturing, engineering, maintenance, safety and environmental representatives.

"Secondary containment or diversion system" means any structures, devices or combinations thereof supplementary to the ordinary containers employed in the normal course of storage, transfer, processing or use, designed and operated to prevent leaks of hazardous substances from becoming discharges.

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

"Sewage sludge" means the dried or semi-liquid residue of a sewage treatment process.

"Small business" means any business which is resident in New Jersey, independently owned and operated, not dominant in its field, and employs fewer than 100 full time employees.

"SPCC plan" means a Federal Spill Prevention Control and Countermeasure plan developed and approved pursuant to 40 CFR 112.

"Standard operating procedure" or "SOP" means the document setting forth the operating procedures covering all details of any operation involving a hazardous substance which is stored, processed, transferred or used at the facility.

"State of the art technology" means up-to-date technology reflected in equipment or procedures that, when applied at a major facility, will result in a significant reduction in the probability of a discharge. The technology represents an advancement in reduction of leaks or discharges and shall have been demonstrated at a similar facility to be reliable in commercial operation or in a pilot operation on a scale large enough to be translated into commercial operation. The technology shall be in the public domain at reasonable cost commensurate with the reduction in probability of leaks or discharges achieved, or otherwise available at reasonable cost commensurate with the reduction in probability of leaks or discharges achieved.

"Static head product testing" means testing which involves the filling of a tank, not under pressure, to determine if there are any leaks over a definite period of time.

"Storage capacity" means that capacity which is dedicated to, used for, or intended to be used for storage of hazardous substances of all kinds. This term shall include, but not be limited to, above- and underground storage tanks, drums, reservoirs, containers, bins, and the intended or actual use of open land or unenclosed space. For a storage tank, the total volumetric design capacity of the tank shall be the storage capacity. This term shall not include the capacity of a heating oil tank servicing only the individual private residence at which it is located.

"Storage tank" means any tank or reservoir which is a container for hazardous substance(s) and which is primarily used for bulk storage.

"Substantial business relationship" means the extent of a business relationship necessary under applicable State law to insure that a guarantee contract issued incident to that relationship is valid and enforceable.

"Substantial damage" means damage which is material and of real worth, value or effect. This term does not include damage which is speculative, contingent, or nominal.

"Substantial reconstruction" means any restoration, refurbishment, renovation or relocation of existing equipment which incurs costs equal to 50 percent or more of the replacement value of the equipment, or which impairs the physical integrity of the equipment or its monitoring systems.

"Substantiation" means information which a claimant submits to the Department in support of a confidentiality claim pursuant to N.J.A.C. 7:1E-8.3.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, "assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

"Tertiary watershed" means drainage basins which are emptied via third-order channels, as delineated by the United States Geological Survey. A small percentage of land drains directly into higher-order streams without passing through a third-order channel. This occurs predominately at the edge of large bays and the ocean.

"Transfer" means onloading or offloading between major facilities and vessels, or vessels and major facilities, and from vessel to vessel or major facility to major facility except for fueling or refueling operations, and except that with regard to the movement of hazardous substances other than petroleum, it shall also include any onloading of or offloading from a major facility.

"Transfer capacity" means the maximum quantity of hazardous substances which can be transferred into or out of a facility in a 24-hour period.

"Transmission pipeline" means new and existing pipe and any equipment, facility, rights-of-way, or building used or intended for use in the transportation of a hazardous substance by a pipeline and having a throughput capacity of 140 gallons per minute (530 liters per minute) or greater. This term does not include the transportation of a hazardous substance through onshore production or flow lines, refining, or manufacturing facilities, or storage terminals or

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inplant piping systems associated with those facilities. Any pipe used or intended to be used in the transportation of a hazardous substance which is not a transmission pipeline will be considered an in-facility pipe.

"Underground storage tank" means any tank defined as such in N.J.A.C. 7:14B.

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

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

Amended by R.1992 d.186, effective April 20, 1992. See: 23 N.J.R. 2848(a), 24 N.J.R. 1484(a).

Definitions added for "assertedly confidential information", "claimant", "class confidentiality determination", "confidential copy", "confidential information", "confidentiality claim" and "confidentiality determination", "contract", "contractor", "final public copy", "record", "requester" and "substantiation".

Case Notes

Terms defined in Spill Compensation and Control Act regulations were not void for vagueness. In re Adoption of N.J.A.C. 7:1E, 255 N.J.Super. 469, 605 A.2d 733 (A.D.1992).

Spill Compensation and Control Act regulations which required reporting of discharges were constitutional. In re Adoption of N.J.A.C. 7:1E, 255 N.J.Super. 469, 605 A.2d 733 (A.D.1992).

Spill Compensation and Control Act regulations which did not specify discharge quantity were not unconstitutional on their face. In re Adoption of N.J.A.C. 7:1E, 255 N.J.Super. 469, 605 A.2d 733 (A.D.1992).

7:1E-1.7 Hazardous substances

- (a) All substances listed in Appendix A to this chapter, incorporated herein by reference, and in any of the following shall be considered hazardous substances for the purposes of this chapter:
 - 1. Petroleum and petroleum products;
 - 2. Pesticides designated as prohibited or restricted use, pursuant to N.J.A.C. 7:30 (effective as of August 21, 1988);
 - 3. Substances designated as environmental hazardous substances, pursuant to N.J.A.C. 7:1G-2.1 (effective as of February 16, 1988);
 - 4. Substances designated as hazardous substances in 40 CFR 116.4 (July 1, 1989 ed.);
 - 5. Substances designated as toxic pollutants in 40 CFR 401.15 (July 1, 1989 ed.);
 - 6. Substances designated as hazardous substances in 40 CFR 302.4 (July 1, 1990 ed.);

- 7. Substances designated as extremely hazardous substances in 40 CFR 355, Appendices A and B (July 1, 1989 ed.); and
- Substances designated as toxic chemicals in 40 CFR 372 (July 1, 1989 ed.).
- (b) In the event of a difference between any list included in (a) above and the list contained in Appendix A to this chapter, the list in Appendix A shall supersede.
- (c) Sewage and sewage sludge shall not be considered hazardous substances for the purposes of this chapter.

Case Notes

Question whether prior operator of business was responsible for contamination precluded summary judgment. Elf Atochem North America, Inc. v. U.S., E.D.Pa.1993, 833 F.Supp. 488.

7:1E-1.8 Environmentally sensitive areas

- (a) For the purposes of designing and implementing a DPCC and a DCR plan, pursuant to N.J.A.C. 7:1E-4, the following shall be considered environmentally sensitive areas:
 - 1. Surface waters, including without limitation the following: large rivers as defined in N.J.A.C. 7:7E–4.7; medium rivers, streams and creeks as defined in N.J.A.C. 7:7E–4.8; ponds and lakes as defined in N.J.A.C. 7:7E–4.9; canals as defined in N.J.A.C. 7:7E–3.8; trout maintenance waters, trout production waters, FW1 and category one waters as defined at N.J.A.C. 7:9–4.4; estuaries, as defined in 33 U.S.C. § 1330(k); and bays, including without limitation open bays, semi-enclosed bays and back bays, as defined in N.J.A.C. 7:7E–4.4 and 4.5;
 - 2. Sources of water supply, including without limitation the following: water supply systems, as defined at N.J.A.C. 7:19–6.2; public community water systems, public noncommunity water systems, public water systems, as defined at N.J.A.C. 7:10–1.3; public water distribution systems, as defined at N.J.A.C. 7:10–13.2; and public water supply systems, as defined at N.J.S.A. 58:11–65;
 - 3. Bay islands, as defined at N.J.A.C. 7:7E-3.21, and barrier island corridors, as defined at N.J.A.C. 7:7E-3.20;
 - 4. Beaches, as defined in N.J.A.C. 7:7E-3.22;
 - 5. Dunes, as defined in N.J.A.C. 7:7E-3.16;
 - 6. Wetlands and wetland transition areas, including without limitation the following: freshwater wetlands and wetland transition areas, as defined at N.J.A.C. 7:7A-1.4; wetlands, as defined in N.J.A.C. 7:7E-3.27; and cranberry bogs, as defined at N.J.A.C. 7:7E-3.29;
 - 7. Breeding areas for forest area nesting species, colonial waterbirds or aquatic furbearers;
 - 8. Migratory stopover areas for migrant shorebirds, raptors or passerines;

- 9. Wintering areas, including coastal tidal marshes and water areas, waterfowl concentration areas and Atlantic white cedar stands:
- 10. Prime fishing areas, as defined in N.J.A.C. 7:7E-3.4;
- 11. Finfish migratory pathways, as defined in N.J.A.C. 7:7E-3.5;
- 12. Estuarine areas supporting various species of submerged vegetation, as defined in N.J.A.C. 7:7E-3.6;
- 13. Shellfish harvesting waters as defined in N.J.A.C. 7:7E-3.2 and 7:9-4.4;
- 14. Forest areas, including prime forestland and unique forestland;
- 15. Habitat for Federal and State endangered or threatened plant and animal species identified pursuant to the Federal Endangered Species Act of 1973, P.L. 93–205; the New Jersey Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A, and the New Jersey Endangered Species List, N.J.A.C. 7:5C–5.1;
- 16. Federal and State wilderness areas, including areas included within the Natural Areas System or the State Register of Natural Areas pursuant to the Natural Areas System Act, N.J.S.A. 13:1B–15.12a et seq. and 15.4 et seq., and N.J.A.C. 7:2–11, and preserved land held by the New Jersey Natural Lands Trust pursuant to the New Jersey Natural Lands Trust Act, N.J.S.A. 13:1B–15.119 et seq.; and
- 17. Areas designated as wild, scenic, recreational, or developed recreational rivers, pursuant to the National Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq., or the New Jersey Wild and Scenic Rivers Act, N.J.S.A. 13:8–45 et seq. and N.J.A.C. 7:38.

7:1E-1.9 Access

(a) During normal business hours and at any time during an actual or suspected discharge or violation the Department and its representatives shall have the right to enter and inspect any facility, vessel, building, or equipment, or any portion thereof, in order to ascertain compliance with the Act, this chapter, or any order, or consent agreement issued or entered into pursuant thereto. At any time, the Department and its representatives shall have the right to enter and inspect those portions of any facility, vessel, building or equipment actively engaged in the transfer or processing of hazardous substances in order to ascertain compliance with the Act or this chapter, or any order, consent order or agreement issued or entered into pursuant thereto. Such right shall include, but not be limited to, the right to test or sample any materials at the facility, to sketch, photograph or videotape any portion of the facility, vessel, building or equipment, to copy or photograph any document or records necessary to determine such compliance or noncompliance; and to interview any employees or representatives of the owner or operator or their contractors. Such right shall be absolute and shall not be conditioned upon any action by the Department, except the presentation of appropriate credentials as requested and compliance with appropriate standard safety procedures.

- (b) (Reserved)
- (c) (Reserved)
- (d) Owners or operators, and any employees or representatives thereof, shall assist and shall not hinder or delay the Department and its representatives in the performance of all aspects of any inspection.

Amended by R.1992 d.186, effective April 20, 1992. See: 23 N.J.R. 2848(a), 24 N.J.R. 1484(a). Deleted (e) regarding availability of information.

Case Notes

Entry upon and use of debtor's property by State Department of Environmental Protection personnel for purposes of implementing necessary remedial action to contain or remove dioxin and minimize public exposure was not contemptuous action as a violation of the automatic stay or consent order in force. In the Matter of Hildermann Industries, Inc., 53 B.R. 509 (Bkrtcy.Ct.N.J.1984).

7:1E-1.10 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, safety or the environment, may waive any provision of these rules.

7:1E-1.11 Applicability

- (a) No person shall cause, suffer, allow or permit a discharge of a hazardous substance.
- (b) Major facilities, as defined in N.J.A.C. 7:1E-1.6, are required to meet the standards of this chapter. The Department shall grant the owner or operator of a major facility a reasonable period of time, in light of all circumstances including economic feasibility, to upgrade to meet the standards of these rules if the major facility proves to the satisfaction of the Department that such a time period is needed. The rate of such upgrading shall be proposed by the owner or operator as part of the DPCC and DCR plans submitted pursuant to N.J.A.C. 7:1E-4.
- (c) A non-major facility which adds storage capacity so as to become a major facility shall be considered a major facility.
- (d) The Department may require of any major facility which has been granted a period to upgrade, 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 a 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 a time

period to upgrade has been granted. If the Department requires the installation of alternative prevention and/or detection devices, the owner or operator shall propose the devices to be used, subject to the Department's approval.

(e) The Department recognizes that the designs of major facilities differ, and, therefore, appropriate methods of discharge prevention are necessarily site-specific. Wherever in these rules a particular method of discharge prevention is mandated, the owner or operator of a major facility may substitute an alternate method if he or she can demonstrate to the satisfaction of the Department that such alternate method will provide protection against discharges at least equivalent to the method it is intended to replace.

Cross References

Violations, civil administrative penalties, see 7:1E-6.8.

Case Notes

Under New Jersey law, insured's disclosures in environmental plans and permit applications did not compel finding of intended or expected environmental damage not covered by comprehensive general liability insurance policies. Pittston Co. v. Allianz Ins. Co., D.N.J.1995, 905 F.Supp. 1279.

Commencing transfer operations of leaking gasoline in severe weather conditions that increased risk of discharge warranted civil administrative penalties. Department of Environmental Protection v. Stolt-Nielsen, 95 N.J.A.R.2d (EPE) 157.

SUBCHAPTER 2. PREVENTION AND CONTROL OF DISCHARGES AT MAJOR FACILITIES

7:1E-2.1 Scope

This subchapter prescribes the rules of the Department applicable to major facilities storing, transferring, processing or using hazardous substances. The following shall govern the standards for equipment and procedures utilized at major facilities.

Cross References

Discharge prevention, containment, and countermeasure plans, see 7.1F_43

Violations, civil administrative penalties, see 7:1E-6.8.

7:1E-2.2 Storage

- (a) Aboveground storage tanks shall meet the following standards:
 - 1. Aboveground storage tank installations shall be provided with an adequate means of secondary containment, designed and built pursuant to N.J.A.C. 7:1E–2.6, and 40 CFR 112, including amendments and supplements, where applicable.

- 2. The base underlying the storage tank shall be made of or surfaced with a material impermeable to passage or chemical attack by the stored substance under the conditions of storage prevailing within the tank. Existing storage tanks shall be exempt from this requirement until such time as they may require substantial reconstruction or replacement, unless the Department orders a storage tank removed from service because of the likelihood of a discharge. Before such a tank is returned to service, it must meet this requirement.
- 3. Pipes leading to and from aboveground storage tanks which enter the tank below the liquid level shall be equipped with valves that can be remotely activated or are readily accessible in the event of a leak or discharge, and which are 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. Such pipes shall not penetrate or pass through any walls, dikes or berms used as secondary containment, unless the impermeability or integrity of the secondary containment is not impaired.
- 4. Aboveground storage tanks with a capacity greater than 2,000 gallons and all appurtenant piping to the first valve shall be subject to initial integrity testing or static head product testing on a schedule which takes into account the age of the tank, proximity to surface water supplies, the leak record of the tank for the preceding five years, and the date of the tank's last integrity test, as delineated in Table 1, and according to the schedule in Table 2. Thereafter, each aboveground storage tank with a capacity greater than 2,000 gallons and its appurtenant piping to the first valve shall undergo integrity testing at intervals based on the construction material of the tank, substances stored, soil conditions, corrosion allowance remaining, corrosion rate, leak history of the tank, degree of risk and the results of visual inspections, as described in the DPCC plan pursuant to N.J.A.C. 7:1E-4.3(d). In no case shall the period of time between tests exceed five years, unless the tank has an inspection and maintenance program that is in compliance with API 653, incorporated herein by reference. Integrity testing should be performed in compliance with accepted industry standards, which include, but are not limited to, API 574, API 653, ASME Section V, ASME Section VIII, and ASME Section X, incorporated herein by reference.

• Table 1
Testing Schedule Factors

Factor	Points
Age of tank (years)	
>50	10
26–50	6
10–25	3
<10	1

Factor	Point
Proximity to surface water	
supplies (feet)	
≤50Ò	5
>500	1
Number of leaks in past five	
years	
≥2	25
1	. 5
0	1
Years since last structural	
integrity test	
≥ 5	15
>1 but <5	5
≤1	1

Table 2
Initial Testing Schedule

Total points from Table 1	Deadline for testing
>30	February 1, 1992
21–30	August 1, 1992
11–20	February 1, 1993
≥10	August 1, 1993

5. A report on the initial integrity testing or static head product testing required by (a)4 above shall be submitted to the Department within 30 days of the completion of the test. This report shall include identification of the facility and the equipment tested, the age of the equipment, the test method(s) used, date of the test(s), name and affiliation of the person performing the test, the summary test results, any repairs performed or scheduled to be performed after the tests, and the expected service life of the equipment. The report shall be certified pursuant to N.J.A.C. 7:1E-4.11, and shall be sent to:

Bureau of Discharge Prevention

New Jersey Department of Environmental Protection

CN 027

Trenton, New Jersey 08625–0027

Trenton, New Jersey 08625–0027

- (b) Underground storage tanks shall meet the requirements of N.J.A.C. 7:14B.
- (c) If a storage tank is served by internal heating coils, such coils, the pipes leading to and from them, and the appurtenances 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 secondary containment or wastewater treatment system.
- (d) Storage tank installations shall be equipped with devices capable of detecting overfills. Every storage tank shall have a high liquid level alarm with an audible or visual signal designed to alert plan personnel of overfills, unless the capacity of the tank is 2,000 gallons or less, in which

case the tank shall be attended at all times during the filling procedure, and one of the following:

- 1. A high high liquid level pump cutoff device designed to stop flow at a predetermined level;
- 2. Direct communication between tank gauger and pumping station; or
- 3. Fast response systems for determining liquid levels, such as monitored visible gauges or computer links.
- (e) Storage tank overfill lines, where they exist, shall be directed into secondary containment, other tanks, or other containment holding areas.
- (f) Mobile or portable storage tanks shall be positioned or located so as to be protected by secondary containment or diversion structures pursuant to N.J.A.C. 7:1E–2.6. Such storage tanks shall not be located in areas subject to periodic flooding or washout, unless adequately protected so as to prevent hazardous substances stored therein from being carried off or discharged at times of flooding or washout.
- (g) Drum storage areas shall be equipped with adequate secondary containment pursuant to N.J.A.C. 7:1E-2.6.

7:1E-2.3 Tank car or tank truck loading/unloading areas

- (a) All tank car or tank truck loading/unloading areas employed in the transfer of hazardous substances shall be paved or surfaced in the area of transfer with impermeable materials, and equipped with an adequate means of secondary containment, designed and built pursuant to N.J.A.C. 7:1E–2.6.
- (b) Prior to the filling of any tank car or tank truck, the lowermost drain and all outlets of such vehicle shall be examined in accordance with the applicable SOP to insure they are closed.
- (c) During filling and prior to departure of any tank car or tank truck, the lowermost drain and all outlets of such vehicles shall be closely examined for leakage, in accordance with the appropriate SOP, 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.
- (d) A system to prevent tank car or tank truck departure before complete disconnect of transfer lines, such as a physical barrier (that is, wheel chocks) or brake interlock system, shall be utilized in transfer areas.
- (e) Tank cars in the process of being loaded or unloaded shall be attended at reasonable intervals during the procedure, and shall be attended during topping off, in accordance with the appropriate SOP. Tank trucks in the process of being loaded or unloaded shall be attended at all

times during the procedure, in accordance with the appropriate SOP.

7:1E-2.4 In-facility pipes for hazardous substances

- (a) Where practicable, each in-facility pipe at a major facility containing a hazardous substance shall be marked by lettering, color banding or color coding to indicate the substance transferred through it.
- (b) New buried piping installations shall be double walled, or have adequate secondary containment pursuant to N.J.A.C. 7:1E-2.6 and a product-sensitive leak detection device, where such devices are state-of-the-art technology.
- (c) Existing buried pipes shall be equipped with productsensitive leak detection devices, where such devices are state-of-the-art technology.
- (d) If a section of buried pipe is exposed for any reason, the owner or operator shall ensure that it is carefully examined for deterioration, and if found to be deteriorated, shall be repaired or replaced. Existing pipes which require substantial reconstruction or replacement shall be upgraded to the standards applicable to new buried piping.
- (e) Pipes removed from service shall be capped or blank-flanged and marked as to origin, or physically removed.
- (f) Pipe supports should be designed so as to minimize abrasion and corrosion and allow for expansion and contraction.
- (g) If in-facility pipes are elevated across roadways, gate check-in procedures, warning signs or other means shall be used to minimize the chance of a vehicular collision with the pipes.

7:1E-2.5 Process areas at major facilities for hazardous substances

- (a) Drainage from production facilities, including buildings, and other process areas shall be engineered so as to provide a means of secondary containment or diversion for leaked hazardous substances.
- (b) Process wastewater and cooling water pipes, plant drains and similar installations which drain into sewers, storm drains, public wastewater treatment plants, water-courses or other routes which drain to the waters of the State shall be engineered so that leaks 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 ensure compliance with the applicable NPDES or NJPDES permit before the water is discharged.

7:1E-2.6 Facility drainage and secondary containment

- (a) All portions or areas of a major facility in which hazardous substances are routinely refined, produced, stored, held, handled, processed, or transferred shall be designed so that any leak will be prevented from becoming a discharge.
- (b) Impermeable secondary containment or diversion structures to prevent leaked hazardous substances from becoming discharges include:
 - 1. Dikes, berms or retaining walls;
 - Curbing;
 - 3. Gutters, culverts and drainage systems;
 - 4. Diversion ponds, lagoons, retention basins, holding tanks, sumps, slop tanks and other collecting systems;
 - Drip pans; or
 - 6. Other equivalent means approved by the Department.
- (c) Secondary containment or diversion systems, structures or equipment shall meet the following standards;
 - 1. The secondary containment or diversion system must block all probable routes by which leaked hazardous substances could reasonably be expected to become discharges;
 - 2. The capacity of the secondary containment or diversion system shall include an additional capacity to accommodate six inches of rainwater, if the secondary containment or diversion structure is located such that rainwater could accumulate in it, and shall be:
 - i. For storage areas, the volume of the largest tank or drum utilizing the system;
 - ii. For tank car or tank truck loading/unloading areas, the volume of the largest compartment in any tank car or tank truck utilizing the area;
 - iii. For buried pipes, the maximum volumetric flow rate multiplied by the maximum amount of time between the detection of a leak and the shutdown of the pipe; or
 - iv. For process areas, the volume of the largest piece of equipment in the area, or the volumetric flow rate through the area multiplied by the maximum amount of time between the detection of a leak and the shutdown of the system, whichever is greater;
 - 3. All components of the secondary containment or diversion system shall be made of or lined with impermeable materials, which must be maintained in an impermeable condition. Existing systems for existing aboveground storage tanks are exempt from this requirement if the existing system:

- i. Can protect ground water for the period of time needed to clean up and remove a leak, up to the entire volume of the largest tank utilizing the system;
 - ii. Allows the visual detection of leaks; and
 - iii. Is inspected daily;
- 4. No process area, transfer area, diked storage area or other storage area, or secondary containment or 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 provision is made to:
 - i. Retain, by valves or other positive means, any accumulated precipitation until its condition can be ascertained; or
 - ii. Intercept any leaked hazardous substances in a permitted industrial wastewater treatment or pretreatment facility or other facility operated in accordance with a valid and effective NJPDES or NPDES permit;
- 5. Catchment basins, lagoons, and so forth, shall 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 leakage. This restriction does not apply to process areas where the substances are brought into proximity as part of a production process; and
- 7. Provision shall be made for promptly removing leaked hazardous substances from a secondary containment or diversion system. Secondary containment systems shall not be used as backup storage systems nor for any other purpose that would impair their capacity to contain leaks.
- (d) A major facility handling nonmiscible lighter-thanwater hazardous substances, which is adjacent to, or sufficiently near a body of surface water such that a leak from the facility would be reasonably expected to become a discharge, shall maintain on site flotation boom and/or filter fences and/or sorbent materials sufficient to contain and prevent the further spread of discharges.

7:1E-2.7 Marine transfer facilities

- (a) All rules and regulations of the U.S. Coast Guard which apply to oil transfer facilities, in particular 33 CFR 154 and 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 or other nonmiscible lighter-than-water hazardous substances are transferred at the facility, there shall be kept available a length of flotation boom or other containment device sufficient to totally enclose a vessel while

- engaged in the transfer of hazardous substances from a vessel to the facility or from the facility to a vessel.
- (c) When transferring hazardous substances between vessels, the containment device shall be capable of encircling both vessels.
- (d) A containment device shall be deployed prior to commencing the transfer of any nonmiscible lighter-thanwater hazardous substance with a flash point in excess of 100 degrees Fahrenheit (38 degrees centigrade) as measured by the Penske-Martens closed cup flash test (ASTM D-93, incorporated herein by reference), when current and wind conditions permit the effective use of such devices and the device can be safely deployed without endangering any personnel, any vessel, or obstructing any shipping channel. This provision does not apply to the transfer of any hazardous substance to be used as a fuel or a lubricant by the vessel.
- (e) When conditions prohibit the immediate deployment of a containment device, such containment device shall be maintained on a standby basis during the transfer for rapid deployment in the event of a discharge.
- (f) When transferring or receiving hazardous substances where the vessel is docked parallel to the dock, the containment device is to originate at some point before the bow and terminate at some point behind the stern of the vessel so that the dock itself constitutes one side of the contained area, if the dock is capable of acting as an effective barrier.
- (g) In the case of an "open pier" or a "finger dock" where the vessel is docked perpendicular to the dock, the boom is to encircle the entire vessel except for the area of the dock the vessel sits adjacent to, if the dock is capable of acting as an effective barrier.
- (h) If a containment device is required by the Department to be in place during a transfer of a hazardous substance, the device shall be deployed not less than 15 feet from the vessel prior to commencement of the transfer operation, except in the case where a dock may act as part of the containment.
- (i) Transfer operations shall not commence, or if commenced shall be discontinued, if:
 - 1. 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, of if severe weather conditions occur after transfer operations have been commenced;
 - 2. Fire occurs in the vicinity of the transfer operation or a nearby portion of the transfer facility unless such a transfer is necessary to prevent further endangerment of personnel, the vessel or facility;

- 3. At any time the transfer system is functioning contrary to the standard operating procedures of the facility;
 - 4. A break occurs in the transfer system;
- 5. There is an apparent discrepancy between the quantity of hazardous substance transferred and received;
 - 6. The communication system is not operative;
- 7. Hazardous substances are observed in the water near any transfer component, unless it can be ascertained that the hazardous substances are not being discharged from the vessel or the marine transfer facility involved in the transfer operation; or
- 8. A discharge occurs during transfer. Transfer shall not be resumed until after the discharge has been reported to the Department, and the Department or Federal on-scene coordinator under the National Contingency Plan pursuant to 40 CFR 1510 is satisfied that adequate steps have been taken to contain the discharge and to prevent further discharges. Under certain circumstances, it may be necessary to continue transfer operations even though a discharge has occurred, for example, in order to off-load the contents of a vessel which is leaking.
- (j) When a containment device is deployed, prior to its removal, all discharged hazardous substances contained by the device shall be properly cleaned up and removed.
- (k) Any containment device deployed shall be retrieved and properly cleaned or disposed of by the owner or operator upon completion of the transfer, or at such time as it is no longer needed to prevent the spread of or to divert a discharge.

Case Notes

Commencing transfer operations of leaking gasoline in severe weather conditions that increased risk of discharge warranted civil administrative penalties. Department of Environmental Protection v. Stolt-Nielsen, 95 N.J.A.R.2d (EPE) 157.

7:1E-2.8 Illumination

- (a) Major facilities which transfer hazardous substances to or from vessels between the hours of sunset and sunrise shall perform all such transfers using fixed lighting that shall adequately illuminate:
 - 1. Each transfer connection point in use at the facility;
 - 2. Each transfer connection point in use on the vessel;
 - 3. Each hazardous substances transfer work area at the facility; and
 - 4. Each hazardous substances transfer work area on the vessel.

- (b) Major facilities which transfer hazardous substances to or from vessels between the hours of sunset and sunrise shall perform all such transfers using fixed or portable lighting that shall adequately illuminate surface area of the water surrounding the vessel sufficient to determine that no discharge is occurring.
- (c) Adequate lighting shall mean any lighting which complies with U.S. Coast Guard rules or regulations applicable to oil transfers facilities, particularly 33 CFR 154.570.

7:1E-2.9 Flood hazard areas

Hazardous substances stored within the 100-year flood hazard area of any watercourse as delineated by the Department in N.J.A.C. 7:13-7.1 or stored within an area known by the owner or operator of the major facility to be subject to a high probability of flooding shall be adequately protected so as to prevent such hazardous substances from being carried off by or being discharged into flood waters.

7:1E-2.10 Leak detection and monitoring

- (a) All equipment and portions of the major facility in service using hazardous substances shall be visually inspected in accordance with standard operating procedures pursuant to N.J.A.C. 7:1E-2.14, in order to detect any leaks or discharges. Visual inspections shall be performed at a minimum according to the following schedule:
 - 1. Prior to each use, all transfer area lighting, and all aboveground transfer valves, pumps, flanges and connections, unless they are not readily accessible, that are to be used in the transfer;
 - 2. Once daily, process areas and all secondary containment systems for aboveground storage tanks which are not impermeable;
 - 3. Once weekly, all other storage areas and secondary containment or diversion systems, and all aboveground pipes;
 - 4. Once quarterly, all other aboveground valves, pumps, flanges, connections and equipment, and all security fences and locks; and
 - 5. Once every five years, the interior of aboveground tanks, unless the tank has an inspection and maintenance program that is in compliance with API 653. Aboveground tanks with a capacity of 2,000 gallons or less shall be exempt from this requirement.
- (b) Records shall be kept for all visual inspections. These records shall document that inspections were performed, any problems found, and the subsequent correction of such problems.

(c) Unless a leak or discharge is likely to be detected by personnel, product gauging, an automatic leak detection system, or other means acceptable to the Department, the owner or operator of a major facility shall implement a ground water monitoring program approved by the Department and satisfying the requirements of N.J.A.C. 7:14A-6.

7:1E-2.11 Housekeeping and maintenance

- (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 the possibility of leakage.
- (b) Tanks, pipes, valves, glands, drums or other equipment leaking hazardous substances shall be promptly repaired, replaced or taken out of use following detection of a leak, unless provision is made to capture and contain leaking hazardous substances in a drip pan or other appropriate containment device. If such provision is made, the leaking item shall be repaired, replaced or taken out of use within 15 days after the leak is detected unless the shutdown of a process unit is necessary. A leak shall be repaired at the earliest period in which either the process is not in operation or the particular unit is out of service, whichever occurs first.
- (c) Cleanup of all leaks or discharges of hazardous substances shall begin promptly upon detection. Loose quantities of hazardous substances shall not be allowed to persist on grounds, floors, walls or equipment, or any other places within the facility.
- (d) The facility shall keep on hand, in convenient locations, adequate quantities of sorbent materials, chemical neutralizing agents or other materials as needed, sufficient to contain and clean up such small leaks or discharges as may be expected to occur in the ordinary operations of the facility.
- (e) The facility shall maintain an adequate supply of protective safety equipment, such as chemically resistant coveralls, boots, or gas masks, in convenient locations for use by any personnel who are required to clean up leaked or discharged hazardous substances. Where protective safety equipment is required by any regulation of the Federal Occupational Safety and Health Administration, compliance with such regulation shall be deemed to fulfill this requirement.
- (f) Secondary containment or diversion systems shall be maintained in good repair, free of cracks through which hazardous substances could be discharged.
- (g) 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.

7:1E-2.12 Employee training

- (a) Owners or operators of major facilities shall implement an appropriate program for training their employees involved in the handling of hazardous substances and shall maintain a written description of the program.
- (b) The training program shall include, at the minimum, the following:
 - 1. A written job description which includes the duties and responsibilities relating to hazardous substances for each position, and the education, experience and training necessary to qualify for the position;
 - 2. Procedures to determine whether an employee has demonstrated the ability to carry out the duties and responsibilities of a specific position; and
 - 3. Specified time periods of in-house training for each position covering orientation, specific hazardous substances training and on-the-job training, trainee evaluation, final qualification, and periodic refresher training. A procedure shall be established for tracking the progress of each employee at regular intervals and shall be included in the written description required by (a) above. In addition, the maximum period of time for each training program shall be established within which the employee must achieve qualified status.
- (c) The training which employees will receive shall, at a minimum, include:
 - 1. General orientation and initial training of new employees before assignment to hazardous substance operations, which shall include instruction on the general site rules and practices, safety procedures and equipment, and the DCR plan, including identification of all environmentally sensitive areas delineated in the plan;
 - 2. Classroom training for new or newly assigned employees involved with hazardous substances. This training shall cover the details of standard operating procedures and safety training specific to a hazardous substance, including a detailed review of the hazardous substance material safety data sheets, the safe handling practices for the hazardous substance, the hazards of the operation involving the hazardous substance, and emergency procedures regarding fires, leaks and discharges;
 - 3. On-the-job training for newly assigned employees, including, but not limited to:
 - i. Equipment familiarization;
 - ii. Operating data collection and entry;
 - iii. Actual equipment startup and shutdown;
 - iv. Control and adjustment of operating conditions; and

- v. The application of standard operating procedures to actual conditions; and
- 4. Refresher training at least once a year which shall present an overview and updated information on the standard operating procedures, hazardous substances material safety data sheets, safe handling of the hazardous substances, and procedures to be followed in the event of a leak or discharge.
- (d) The training program shall specify the qualifications required for the personnel responsible for training employees working with hazardous substances.
- (e) Documentation of all training, evaluation and qualifying activities for each employee shall be kept at the facility and shall include identification of all personnel trained, their job titles, subjects covered and training dates.
- (f) Owners or operators shall have procedures to insure that all employees utilized by outside contractors have received appropriate training.

7:1E-2.13 Security

- (a) Major facilities shall be adequately illuminated so that personnel on the premises can detect intruders, leaks or discharges during hours of darkness.
 - (b) Major facilities shall have security consisting of:
 - 1. Fencing adequate to prevent unauthorized entry (full fencing on land) of all portions or areas within which hazardous substances are stored, processed, transferred or used, with entrance gates locked and/or guarded when the facility is unattended, and either locked, guarded or under observation by personnel at all other times; or
 - 2. All of the following:
 - i. Valves which will permit escape of a tank's or other container's contents to the surface securely locked in the closed position when not in use;
 - ii. Starter controls on all pumps locked in the "off" position when the pumps are not in use unless the controls are located at a site accessible only to authorized personnel, which site is itself attended or locked; and
 - iii. The open ends of all pipes securely capped or blank-flanged when not in use for an extended time.

7:1E-2.14 Standard operating procedures

- (a) The standard operating procedures shall be written in English in a manner understandable by employees of the major facility and shall also be written in the language of fluency of employees utilizing those SOPs not fluent in English.
- (b) A copy of the standard operating procedures shall be readily available to employees.

- (c) A copy of material safety data sheets or fact sheets for each hazardous substance used or stored at the facility shall be readily available to employees.
- (d) The standard operating procedures shall include, but not be limited to:
 - 1. Simplified process flow sheets and a process description defining the operation and showing flows, temperatures and pressures;
 - 2. Procedures and conditions for normal operation;
 - 3. A description of the most common abnormal conditions, including the control and mitigating procedures to be followed to return to normal conditions;
 - 4. A description of leak or discharge conditions which could occur, including the control and mitigation procedures to be followed to reduce the impact of the leak or discharge conditions;
 - 5. Pre-startup procedures;
 - 6. Startup procedures including conditions to be maintained during startup;
 - 7. Shutdown procedures including provisions for normal and emergency shutdown and details on the condition of equipment to be maintained after shutdown;
 - 8. A description of the type, location and purpose of containment systems and devices, leak monitoring equipment and alarms;
 - 9. Safety procedures related to each specific operation in the standard operating procedures;
 - 10. Procedures for visual inspection of equipment;
 - 11. Procedures to prepare equipment for maintenance and inspection of maintenance work upon completion and prior to placement of equipment in service; and
 - 12. Log sheets and checklists where appropriate to the operation.
- (e) A generic SOP may be written when more than one piece of equipment designed to perform the same function is located at the facility. Such a generic SOP must cover all hazardous substances used by all the equipment and must delineate any special conditions associated with a specific piece of equipment or hazardous substance.
- (f) Modifications to the standard operating procedures shall be incorporated into the standard operating procedures prior to their implementation.
- (g) A current index of the standard operating procedures with corresponding latest dates of issue shall be maintained and readily available.

7:1E-2.15 Recordkeeping

- (a) The owner or operator of a major facility shall maintain records of employee training and drills for discharge prevention, hazardous substances inventories, and confirmation reports on discharges pursuant to N.J.A.C. 7:1E-5.8 for a period of 10 years.
- (b) The owner or operator of a major facility shall maintain records of integrity testing, inspection, major maintenance, and major repair of all structures, equipment, and detection or monitoring, prevention or safety devices related to discharge prevention and response for the lifetime of the structure, equipment or device.
- (c) All records shall be available for inspection upon the request of the Department or appropriate local agencies.
- (d) Records may be retained on microfilm or microfiche or may be kept in an electronic or computerized form if they are adequately backed up.

SUBCHAPTER 3. TRANSMISSION PIPELINES

7:1E-3.1 Scope

This subchapter prescribes the rules of the Department for information to be submitted concerning transmission pipelines. The following rules shall govern the preparation and submission of registrations.

7:1E-3.2 Registration of transmission pipelines

- (a) By February 1, 1992, the owner or operator of a transmission pipeline shall submit the following information to the Department, on forms provided by the Department;
 - 1. The business name(s), address and telephone number of the owner or operator of the facility;
 - 2. The name and business address of the owner or operator's registered agent;
 - 3. The storage capacity of any facility;
 - 4. A description of the hazardous substances which are stored, held, handled, transferred or transported by the facility;
 - 5. The transfer capacity and the average daily throughput, on an annual basis, of the transmission pipeline for each hazardous substance;
 - 6. An accurate map or maps, showing the location of each of the owner or operator's pipeline facilities, storage areas, transfer areas, or other structures in or on which hazardous substances are stored or handled, the geographical features of the surrounding area, and the location at which the pipeline facility enters or leaves the State. Those maps which are currently maintained pursu-

ant to regulations of the U.S. Department of Transportation are sufficiently accurate;

- 7. An inventory of all types of pipe used for the transmission of hazardous substances, including a history of major repairs, major maintenance and major leaks from all pipes; and
- 8. Any certifications required pursuant to N.J.A.C. 7:1E-4.11(b).
- (b) Any change in the information supplied pursuant to (a) above shall be reported to the Department within 60 days.
- (c) The information required by (a) or (b) above shall be sent to:

Bureau of Discharge Prevention

New Jersey Department of Environmental Protection

CN 027

Trenton, New Jersey 08625–0027 Attention: Pipeline Registration

7:1E-3.3 Standards

All transmission pipelines shall conform to 49 CFR 195, "Transportation of Liquids by Pipeline", and any future supplements and amendments thereto.

7:1E-3.4 Discharge cleanup information

- (a) By February 1, 1992, the owner or operator of a transmission pipeline shall submit the following information to the Department at the address specified in N.J.A.C. 7:1E-3.2(c):
 - 1. A summary of the action plan used in responding to, and minimizing health and environmental dangers from, fires, explosions or discharges, including the deployment of personnel and equipment, the chain of command for an emergency response action, and notification procedures pursuant to N.J.A.C. 7:1E-5;
 - 2. A list of containment and removal equipment and materials to which the transmission pipeline 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 has filed information with the Department pursuant to N.J.A.C. 7:1E–4.2, it is sufficient to supply the name of the organization in lieu of an equipment list;
 - 3. A list of the trained personnel who are available to operate such equipment and a brief description of their qualifications. If personnel to be used for this purpose are employees of a discharge cleanup organization which has filed information with the Department pursuant to N.J.A.C. 7:1E-4.2, it is sufficient to supply the name of

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the organization in lieu of a personnel list. In lieu of supplying a list of names, the owner or operator may supply a list of job titles of employees who will be assigned to operate containment and removal equipment, and a statement of the minimum qualifications that will be required of each employee so assigned;

- 4. The name, title and 24-hour business telephone number of facility's response coordinator or other person authorized to hire contractors and release funds for discharge response, containment, cleanup and removal. A response coordinator or alternate shall be available at all times; and
- 5. Procedures for determining the recycling or disposal options for hazardous substances or contaminated soil, debris, and so forth gathered during cleanup and removal operations.

SUBCHAPTER 4. REGISTRATIONS AND PLANS

7:1E-4.1 Scope

This subchapter prescribes the rules of the Department for information to be submitted concerning major facilities and discharge cleanup organizations. The following rules shall govern the preparation and submission of registrations, discharge prevention, containment and countermeasure plans, and discharge cleanup and removal plans.

Case Notes

Regulatory requirement for submission of discharge cleanup and recovery plan is at odds with Spill Compensation and Control Act where overlapping federal statutes or regulations also require submission of such a plan. GATX Terminals Corp. v. Dept. of Environmental Protection, 173 N.J.Super. 531, 414 A.2d 980 (App.Div.1980), reversed 86 N.J. 46, 429 A.2d 355 (1981).

Discharge cleanup and removal (DCR) plan pertains to procedures to be followed in the event of a discharge, as well as equipment available to contain and remove discharged hazardous substances. GATX Terminals Corp. v. Dept. of Environmental Protection, 173 N.J.Super. 531, 414 A.2d 980 (App.Div.1980), reversed 86 N.J. 46, 429 A.2d 355 (1981).

7:1E-4.2 Registration of discharge cleanup organizations

- (a) Discharge cleanup and removal organizations, other than owners or operators of major facilities covered by DCR plans who intend to clean up only discharges from their own facilities, shall submit in writing to the Department on or before January 1 of each year the following information:
 - 1. The name of the organization;
 - 2. The form of the organization, such as corporation, cooperative or association;
 - 3. Name(s) of executive officer(s);
 - 4. The mailing address;

- 5. The address, telephone number, and name of the manager of each office maintained by the organization;
- 6. The 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. Areas of the State where the organization will respond to discharges;
- 10. Hours during which the organization will be available to respond to discharges. If other than around-the-clock, the organization shall supply the Department with at least two telephone numbers by which the organization can be reached during off-hours in an emergency;
- 11. A brief record of the organization's response history in New Jersey and other states for the previous two years, indicating the magnitude of discharges and the types of hazardous substances handled; and
- 12. Any certifications required pursuant to N.J.A.C. 7:1E-4.11.
- (b) Two copies of the information required by (a) above shall be sent to the Department at:

Bureau of Discharge Prevention

New Jersey Department of Environmental Protection

CN 027

Trenton, New Jersey 08625-0027

Attention: Discharge Cleanup Organization Submission

Case Notes

Comparison of regulation to similar federal regulations as basis for guidance in determining authority of Department of Environmental Protection. GATX Terminals Corp. v. Dept. of Environmental Protection, 86 N.J. 46, 429 A.2d 355 (1981).

7:1E-4.3 Discharge prevention, containment and countermeasure plans

(a) The owner or operator of a major facility shall prepare a DPCC plan demonstrating compliance with the standards in N.J.A.C. 7:1E-2, and shall appoint a response coordinator for each site who shall be responsible for insuring compliance with the DPCC plan, the Act, and this chapter. The response coordinator shall be responsible for submission of all reports required by this chapter to the Department.

- (b) The DPCC plan shall contain the following general information:
 - 1. The name, telephone number and location of the facility including street and mailing address, county, municipality, tax lot and block number, and the coordinate centroid in New Jersey State Plane;
 - 2. The name(s), telephone number(s) and business address(es) of the owner or operator of the facility;
 - 3. The name and business address of the owner's or operator's registered agent, if applicable;
 - 4. A general site plan, which accurately reflects the current facility, showing the location of storage tanks, drum storage areas, process buildings, 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, and all facility fencing and gates. It shall be drawn to a scale in the range of one inch equals 30 feet to one inch equals 200 feet, such that it is sufficient to delineate all items to be mapped, and shall be certified by a licensed land surveyor;
 - 5. A drainage and land use map, in the format prescribed in N.J.A.C. 7:1E-4.10, which accurately reflects the current facility and the surrounding area, including the location of all major sewers, storm sewers and all watercourses into which the surface water runoff from the facility drains and the location of all supply or monitoring wells:
 - 6. Topographical maps, in the format prescribed in N.J.A.C. 7:1E-4.10, covering all surrounding area which could be affected by a discharge from the facility, including environmentally sensitive areas; and
 - 7. The 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 discharge events within the previous 12 months, the DPCC plan shall include a description of each such event, corrective action taken, and plans for preventing recurrences.
- (d) The DPCC plan shall include, at a minimum, the following technical information:
 - 1. A description of all storage areas, the schedule or criteria for scheduling integrity testing and maintenance or reconstruction, pursuant to N.J.A.C. 7:1E-2.2;
 - 2. A description of any tank car or tank truck loading/unloading area, pursuant to N.J.A.C. 7:1E-2.3;
 - 3. A description of all secondary containment or diversion systems, including their capacity and materials of construction, pursuant to N.J.A.C. 7:1E-2.6;
 - 4. A description of the fixed and portable lighting in use in marine transfer areas, pursuant to N.J.A.C. 7:1E-2.8;

- 5. A description of any flood hazard areas within the facility's boundaries, and any measures implemented to protect hazardous substances from flood waters, pursuant to N.J.A.C. 7:1E-2.9;
- 6. A description of all leak detection or monitoring procedures, pursuant to N.J.A.C. 7:1E-2.10;
- 7. An outline of the housekeeping and maintenance program, pursuant to N.J.A.C. 7:1E-2.11;
- 8. An outline of the personnel training program and procedures for insuring proper training of contractors, including a catalog list of all pertinent documents, pursuant to N.J.A.C. 7:1E-2.12;
- 9. A description of the physical security measures at the facility, pursuant to N.J.A.C. 7:1E-2.13;
- 10. A catalog list of all standard operating procedures that have been written pursuant to N.J.A.C. 7:1E-2.14; and
- 11. A description of the recordkeeping system employed by the facility, pursuant to N.J.A.C. 7:1E-2.15.
- (e) The DPCC plan shall include a schedule, to be approved by the Department, for upgrading equipment or portions of the facility to meet the requirements of this chapter.
- (f) The owner or operator shall maintain and make available for Department review, at either the facility or the Department's offices at the discretion of the Department, the following updated documentation including a catalog list of all such documents showing title, identification number and date of issue:
 - 1. Facility inventory of hazardous substances;
 - 2. Updated process flow and piping and instrumentation diagrams;
 - 3. Standard operating procedures;
 - 4. Facility emergency response plan;
 - 5. Job classifications and job descriptions; and
- 6. Housekeeping and maintenance program procedures and records.

7:1E-4.4 Discharge cleanup and removal plan

- (a) The owner or operator of a major facility shall prepare and implement a DCR plan containing, at a minimum, the following information:
 - 1. A summary of the action plan used in responding to, and minimizing health and environmental dangers from, fires, explosions, or discharges of hazardous substances, including the deployment of personnel and equipment, the chain of command for an emergency response action and notification procedures, pursuant to N.J.A.C. 7:1E-5. The action plan shall provide for annual emer-

gency response drills to determine the currency and adequacy of, and personnel familiarity with, the emergency response action plan. When possible, this annual drill can be combined with other required emergency response drills;

- 2. A list of containment and removal equipment and materials 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 has filed information with the Department pursuant to N.J.A.C. 7:1E-4.2, it is sufficient to supply the name of the organization in lieu of an equipment list. A copy of all current contracts or agreements between the owner or operator and a discharge cleanup organization for emergency response service shall be maintained at the facility or with the facility's registered agent, as appropriate, and shall be available to the Department for review upon request;
- 3. A list of the trained personnel who are available to operate such equipment and a brief description of their qualifications. If personnel to be used for this purpose are employees of a discharge cleanup organization which has filed information with the Department pursuant to N.J.A.C. 7:1E-4.2, it is sufficient to supply the name of the organization in lieu of a personnel list. In lieu of supplying a list of names, the owner or operator may supply a list of job titles of employees who will be assigned to operate containment and removal equipment, and a statement of the minimum qualifications that will be required of each employee so assigned;
- 4. The name, title and 24-hour business telephone number of the facility's response coordinator or other person authorized to hire contractors and release funds for discharge response, containment, cleanup and removal. A response coordinator or alternate shall be available at all times;
- 5. A plan identifying priorities for the off-site deployment of personnel and equipment to protect residential, environmentally sensitive, or other areas from a discharge based on use, seasonal sensitivity, or other relevant factors:
- 6. An environmentally sensitive areas protection plan, pursuant to N.J.A.C. 7:1E-4.11, certified by a marine biologist or aquatic biologist or ecologist or freshwater equivalent and ornithologist acceptable to the Department, that shall:
 - i. Identify all environmentally sensitive areas that could be affected by a discharge from the facility. The mapping required by N.J.A.C. 7:1E-4.3(b)6 may serve as this identification;
 - ii. Identify the seasonal sensitivity of the areas;

- iii. Provide for an environmental assessment of the impact of any discharge on the identified areas; and
- iv. Provide for the protection from, and mitigation of, any potentially adverse impact on the identified areas in the event of a discharge;
- 7. Procedures for determining the recycling or disposal options for hazardous substances or contaminated soil, debris, and so forth, gathered during cleanup and removal operations;
- 8. A copy of an agreement with the local emergency planning committee or committees that coordinates the emergency responses of the parties to the agreement; and
- 9. A copy of all financial responsibility documents required pursuant to N.J.A.C. 7:1E-4.5 in accordance with N.J.A.C. 7:1E-4.5(e) or Appendix B.
- (b) Each major facility shall have available to it, by ownership or by arrangement with a discharge cleanup organization which is registered with the Department pursuant to N.J.A.C. 7:1E-4.2, adequate equipment and personnel to clean up any discharge that occurs at the facility.

Case Notes

Regulation provides for preconstruction review of major facilities. GATX Terminals Corp. v. Dept. of Environmental Protection, 173 N.J.Super. 531, 414 A.2d 980 (App.Div.1980), reversed 86 N.J. 46, 429 A.2d 355 (1981).

7:1E-4.5 Financial responsibility

- (a) The owner or operator of a major facility shall demonstrate financial responsibility for taking corrective action resulting from the discharge of a hazardous substance, and for the removal of any abandoned structure owned or operated, as the case may be, by the owner or operator.
- (b) The owner or operator of a major facility shall demonstrate financial responsibility in the minimum amount of \$1 million per occurrence and \$2 million annual aggregate; provided, however, that if the owner or operator establishes to the satisfaction of the Department that a lesser amount will be sufficient to protect the environment and public health, safety and welfare, the Department may accept evidence of financial responsibility in such lesser amount. In determining the sufficiency of the amount of financial responsibility, the Department may consider factors including, without limitation, the nature and quantity of the hazardous substances which may be present at the facility, and the proximity and nature of environmentally sensitive areas located near the facility.
- (c) The required per occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner or operator.
- (d) Financial responsibility may be established by any one, or by any combination, of the following mechanisms:

- 1. Financial test of self-insurance;
- 2. Guarantee;
- 3. Insurance or risk retention group coverage;
- 4. Surety bond; or
- 5. Letter of credit.
- (e) The owner or operator of any major facility which demonstrates financial responsibility pursuant to the requirements of the Federal Oil Pollution Act of 1990, P.L. 101–380, shall be deemed to have demonstrated financial responsibility in accordance with this chapter and the Act.
- (f) An owner or operator may use self-insurance in combination with a guarantee only if, for the purposes of meeting the requirements of the financial test under this rule, the financial statements of the owner or operator are not consolidated with the financial statements of the guarantor.
- (g) To pass the financial test of self-insurance, the owner or operator or guarantor must meet the criteria of (g)1 or 2 below based on the year-end financial statements of the latest completed fiscal year and maintain onsite a letter signed by the chief financial officer worded as specified in Appendix B, incorporated herein by reference. This letter shall be updated within 120 days of the close of each financial reporting year. In addition:
 - 1. The owner or operator or guarantor must have a tangible net worth of at least \$10 million, and the owner or operator or guarantor must:
 - i. Have a tangible net worth of at least 10 times the required aggregate amount in (b) above plus any other liability coverage for which the owner or operator is using the test to demonstrate financial responsibility to the State or EPA;
 - ii. Either file financial statements annually with the U.S. Securities and Exchange Commission, the Energy Information Administration, or the Rural Electrification Administration; or report annually the firm's tangible net worth to Dun and Bradstreet, and Dun and Bradstreet must have assigned the firm a financial strength rating of 4A or 5A; and
 - iii. Have year-end financial statements which do not include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification; or
 - 2. The owner or operator or guarantor must have a bond rating of AAA, AA, A or BBB from Standard and Poor's, or Aaa, Aa, A or Baa from Moody's, or net working capital of at least six times the required amount, and the owner or operator, or the guarantor, must have:
 - i. A tangible net worth of at least six times the applicable aggregate amount in (b) above;

- ii. U.S. assets that are at least 90 percent of total assets or at least six times the required aggregate amount; and
- iii. Fiscal year-end financial statements filed with U.S. Securities and Exchange Commission, Energy Information Administration, or Rural Electrification Administration, or examined by a certified public accountant accompanied by the accountant's report of the examination.
- (h) If an owner or operator or guarantor using the financial test of self-insurance finds that he or she no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator must obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.
- (i) The Department may require reports of financial condition at any time from the owner or operator, or guarantor. If the Department finds, on the basis of such reports or other information, that the owner or operator, or guarantor, no longer meets the financial test requirements of (g) above, the owner or operator must obtain alternate coverage within 30 days after notification of such a finding.
- (j) If the owner or operator fails to obtain alternate coverage within 150 days of finding that he or she no longer meets the requirements of the financial test based on the year-end financial statements, or within 30 days of notification by the Department that he or she no longer meets the requirements of the financial test, the owner or operator must notify the Department of such failure within 10 days.
- (k) To demonstrate financial responsibility through a guarantee:
 - 1. Within 120 days of the close of each financial reporting year, the guarantor must demonstrate that it meets the financial test criteria set forth in (g) above by completing the letter from the chief financial officer as specified in Appendix B and must deliver the letter to the owner or operator and the Department. If the guarantor fails to meet the requirements of (g) above, within 120 days of the end of that financial reporting year the guarantor shall send by certified mail, before cancellation or nonrenewal of the guarantee, notice to the owner or operator and the Department. If the Department notifies the guarantor that he or she no longer meets the requirements of (g) above, the guarantor must notify the owner or operator within 10 days of receiving such notification from the Department. In both cases, the guarantee will terminate no less than 120 days after the date the owner or operator receives the notification or 120 days after the date the Department receives the notification, whichever is later, as evidenced by the return receipt. The owner or operator must obtain alternate coverage within 30 days; and

- 2. The guarantee must be worded as specified in Appendix B, and a copy of the guarantee maintained at the facility at all times.
- (l) To demonstrate financial responsibility through liability insurance:
 - 1. Such insurance must be obtained from a qualified insurer or risk retention group. It may be in the form of a separate insurance policy or an endorsement to an existing insurance policy;
 - 2. An existing insurance policy must be amended by an endorsement worded as specified in Appendix B and a separate insurance policy must be evidenced by a certificate of insurance worded as specified in Appendix B. A copy of this endorsement or certificate must be maintained at the facility at all times;
 - 3. Cancellation or any other termination of the liability insurance by the insurer or group will be effective only upon written notice and only after the expiration of 60 days after the date on which the insured receives the written notice or 60 days after the date on which the Department receives the written notice, whichever is later; and
 - 4. Within 60 days of receipt of a notice of cancellation or other termination, the owner or operator shall provide alternative financial assurance as specified in this section.
- (m) To demonstrate financial responsibility through a surety bond:
 - 1. The surety company issuing the bond must be among those listed as acceptable sureties on Federal bonds in the latest Circular 570 of the U.S. Department of the Treasury;
 - 2. The surety bond must be worded as specified in Appendix B, and a copy of the surety bond maintained at the facility at all times;
 - 3. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and annual aggregate sums;
 - 4. The owner or operator who uses a surety bond to meet the requirements of (a) above must establish a standby trust fund when the surety bond is acquired. The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or New Jersey agency. Under the terms of the bond, all amounts paid by the surety under the bond will be deposited directly into the standby trust fund in accordance with instructions from the Department;

- 5. The surety(ies) may cancel the bond by sending written notice of cancellation by certified mail to the principal and the Department, provided, however, that the cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the principal or the date of receipt of the notice of cancellation by the Department, whichever is later, as evidenced by the return receipt; and
- 6. Within 60 days of receipt of a notice of cancellation or other termination, the owner or operator shall provide alternative financial assurance as specified in this section.
- (n) To demonstrate financial responsibility through a letter of credit:
 - 1. The issuing agency must be an entity that has the authority to issue letters of credit in the State and whose letter-of-credit operations are regulated and examined by a State agency;
 - 2. The letter of credit must be worded as specified in Appendix B, and a copy of the letter of credit maintained at the facility at all times;
 - 3. The owner or operator who uses a letter of credit to meet the requirements of (a) above must establish a standby trust fund when the letter of credit is acquired. The trustee shall be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or New Jersey agency. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Department will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Department;
 - 4. The letter of credit must be irrevocable with a term specified by the issuing institution, and must provide that credit be automatically renewed for the same term as the original term, unless, at least 120 days before the current expiration date, the issuing institution notifies the owner or operator and the Department by certified mail of its decision not to renew the letter of credit. Under the terms of the letter of credit, the 120 days will begin on the date when the owner or operator receives the notice or on the date when the Department receives the notice, whichever is later, as evidenced by the return receipt; and
 - 5. Within 60 days of receipt of a notice of cancellation or other termination, the owner or operator shall provide alternative financial assurance as specified in this section.
- (o) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code:
 - 1. Naming an owner or operator as debtor, the owner or operator shall notify the Department by certified mail of such commencement; or

- 2. Naming the provider of financial assurance as debtor, the provider shall notify the owner or operator by certified mail of such commencement, and the owner or operator shall then notify the Department.
- (p) An owner or operator will be deemed to be without the required demonstration of financial responsibility in the event of commencement of bankruptcy or other incapacity of his or her provider of financial assurance. Within 30 days after receiving notice of such an event, the owner or operator shall submit to the Department an alternate demonstration of financial responsibility.
- (q) Owners or operators of major facilities who are unable to demonstrate evidence of financial responsibility by the date of the submission of a DCR plan may apply to the Department for suspension of enforcement. In order to receive suspension of enforcement, the owner or operator must demonstrate that:
 - 1. Methods of financial responsibility are not practicable to him or her; and
 - 2. A good faith effort has been made to secure financial responsibility in the full aggregate amount.
- (r) The Department may establish an alternate minimum amount of financial responsibility in lieu of suspending enforcement.

Case Notes

Spill Act provision allowing injured person to bring claim directly against "the bond, the insurer, or any other person providing evidence of financial responsibility" did not authorize direct action by injured party against insurer. Caldwell Trucking PRP Group v. Spaulding Composites, Co., Inc., D.N.J. 1995, 890 F. Supp. 1247.

Portion of regulation requiring a description of a facility's approach to compliance with subchapter standards invalid as to those standards involving design and construction of major facilities. GATX Terminals Corp. v. Dept. of Environmental Protection, 173 N.J.Super. 531, 414 A.2d 980 (App.Div.1980), reversed 86 N.J. 46, 429 A.2d 355 (1981).

7:1E-4.6 Preparation and submission of plans

- (a) The owner or operator of a major facility shall prepare a DPCC plan and a DCR plan in accordance with N.J.A.C. 7:1E-4.3 and 4.4. The DPCC and DCR plans shall be prepared and submitted as a single document.
- (b) The owner or operator of an existing major facility shall submit a DPCC plan and a DCR plan, certified pursuant to N.J.A.C. 7:1E-4.11, to the Department at the address in (g) below. Such plans shall be submitted no later than the following dates:
 - 1. By February 1, 1992, all facilities with a storage capacity for hazardous substances of all kinds of at least 300,000 gallons, but less than one million gallons;
 - 2. By August 1, 1992, all facilities with a storage capacity for hazardous substances of all kinds of at least one million gallons, but less than four million gallons;

- 3. By February 1, 1993, all facilities with a storage capacity for hazardous substances of all kinds of four million gallons or greater;
- 4. By August 1, 1993, all facilities with a storage capacity for hazardous substances other than petroleum or petroleum products of at least 80,000 gallons, but less than 200,000 gallons, or for hazardous substance of all kinds of at least 200,000 gallons, but less than 300,000 gallons;
- 5. By February 1, 1994, all facilities with a storage capacity for hazardous substances other than petroleum or petroleum products of at least 40,000 gallons, but less than 80,000 gallons; and
- 6. By August 1, 1994, all facilities with a storage capacity for hazardous substances other than petroleum and petroleum products of at least 20,000 gallons, but less than 40,000 gallons.
- (c) The owner or operator of a new major facility shall submit a DPCC plan and a DCR plan, certified pursuant to N.J.A.C. 7:1E-4.11, to the Department at least 180 days prior to the anticipated operational date of the facility, and shall implement the approved plans prior to operating the facility.
- (d) 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.
- (e) Within 60 calendar days of receipt of a DPCC and a DCR plan, the Department shall notify the owner or operator in writing as to whether all information required by (a) above to begin technical review of the plans has been submitted. A list of additional information required will be included if the plans are deemed incomplete.
- (f) Unless time is extended by the Department, such additional information as outlined in this subchapter as the Department may require shall be submitted within 30 days of receipt of the Department's request. If additional information requested by the Department is not submitted within the 30-day period, the Department may deny approval of the plan without prejudice to resubmission.
- (g) Two copies of a DPCC or DCR plan shall be submitted to the Department for approval. Copies shall be sent to:

Bureau of Discharge Prevention

New Jersey Department of Environmental Protection

CN 027

Trenton, New Jersey 08625–0027

Attention: Plan Submittal

Petition for Rulemaking: Seeking to extend deadline for submitting maps.

See: 24 N.J.R. 1122(d).

Case Notes

While new major facilities must meet the standards of the discharge prevention regulations, existing facilities have a reasonable time to meet the standards. GATX Terminals Corp. v. Dept. of Environmental Protection, 86 N.J. 46, 429 A.2d 355 (1981).

7:1E-4.7 Approval and conditional approval of plans

- (a) The Department shall act to approve or deny approval of a complete submission of a DPCC or DCR plan, pursuant to N.J.A.C. 7:1E-4.6, within 180 days of receipt, or no later than the date on which the new major facility is issued treatment works approvals pursuant to N.J.A.C. 7:14A-12 which are required as conditions precedent to lawful operation of the facility, whichever is longer.
- (b) If the Department finds a plan to be incomplete or denies approval of a plan, the owner or operator shall have 30 days within which to submit an acceptable plan, unless the Department extends the time for good cause shown.
- (c) The Department may conditionally approve a plan if the maps required pursuant to N.J.A.C. 7:1E-4.3(b)5 or 6 are incomplete or are not in the format prescribed by N.J.A.C. 7:1E-4.10. The Department shall grant such conditional approval if the Department determines that:
 - 1. The plan otherwise satisfies all of the requirements of this subchapter; and
 - 2. The owner or operator is making a good faith effort to provide complete, acceptable maps.
- (d) The conditional approval under (c) above shall set forth a date on which the conditional approval will expire unless the owner or operator has provided maps which satisfy the requirements of N.J.A.C. 7:1E-4.10.
- (e) Implementation of the DPCC and DCR plans shall begin immediately upon receipt of the Department's approval.
- (f) The Department may inspect major facilities prior to approving DPCC or DCR plans and at reasonable intervals thereafter in order to ascertain compliance with the plans.
- (g) The major facility shall keep a copy of the approved or conditionally approved plan onsite at all times.

Case Notes

Comparison of regulation to similar federal regulations as basis for guidance in determining authority of Department of Environmental Protection. GATX Terminals Corp. v. Dept. of Environmental Protection, 86 N.J. 46, 429 A.2d 355 (1981).

7:1E-4.8 Denial or revocation of approval of DPCC or DCR plans or amendments

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

- (b) The Department may revoke its approval of a DPCC or DCR plan if the owner or operator fails to comply with an approved schedule for bringing the facility's plan into compliance with the requirements of these rules, or submits to the Department false or willfully misleading information.
- (c) The owner or operator of a major facility who is aggrieved by any decision of the Department to deny or revoke approval of a DPCC or DCR plan or amendment thereto has the right to a hearing before the Department, pursuant to the procedure outlined in N.J.A.C. 7:1E-6.

7:1E-4.9 Amendment of plans by owners or operators

- (a) Written notice of proposed new construction or installation, substantial modification or replacement of any aboveground storage tank, other aboveground enclosed storage space, any appurtenant structures, or leak detection or other monitoring, prevention, or safety systems or devices shall be provided to the Department at least 60 days prior to the commencement of construction, installation or modification. This provision does not apply to construction, installation or modification contained in a schedule for upgrading in an approved DPCC plan.
- (b) Within 30 days of any change, the owner or operator of a major facility having an approved DPCC or DCR plan shall report to the Department 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 or DCR plan to reflect such changes, and shall certify the amendments pursuant to N.J.A.C. 7:1E–4.11, prior to submission to the Department for approval.
- (c) The Department shall act to approve or deny approval of proposed amendments within 60 days.
- (d) Amendments to DPCC or DCR plans shall be implemented promptly upon approval by the Department.
- (e) Notwithstanding compliance with (a) above, at least once every three years following approval or conditional approval of the DPCC and DCR plans, the owner or operator shall renew the DPCC and DCR plans. The renewal shall consist of revised plans or a certification that the existing plans on file with the Department are current. Renewals shall be accompanied by a summary of leaks and discharges at the facility since the plan approval, conditional approval, or renewal. A revised plan may be required at the time of renewal so as to incorporate into the plan all amendments adopted since the approval, conditional approval, or last renewal. All renewals shall be certified pursuant to N.J.A.C. 7:1E-4.11. Any DPCC or DCR plan which is not renewed within three years of the date of approval, conditional approval, or last renewal, shall be considered expired.

7:1E-4.10 Mapping criteria

- (a) Drainage and land use, and topographical maps delineating environmentally sensitive areas, required pursuant to N.J.A.C. 7:1E-4.3(b)5 and 6, shall meet the following standards:
 - 1. All mapping shall employ current commercially available mylar orthophoto basemaps (quarterquads) or other comparable current basemaps at a scale equal to or larger than 1:12,000, such as 1:9,600.
 - 2. If required for clarity, all delineations shall be made on stable base mylar overlays registered to the basemaps.
 - 3. Mapped information shall not be so crowded as to obscure the clarity of data of any features.
 - 4. All maps shall have a minimum of four reference points (tics) widely spaced across the map for which the geographic coordinates are known. The coordinates for each tic shall be listed by the appropriate ticmark and shall be in New Jersey State Plane Feet.
 - 5. Delineations shall be made with a standard drafting/technical pen producing a line width of 0.01 inches, provided however, that a greater line width of up to 0.05 inches may be used when necessary for emphasis. In all cases, the drafted lines and points shall bisect the feature as seen on the basemap and shall be within \pm 50 feet of its location on the ground.
 - 6. Mapped data from other sources must be accurately transferred to the basemaps.
 - 7. The name and the affiliation of the preparer of the map, the date of preparation, the scale or scales employed, and the sources of data used shall be stated in a legend block on each map.
- (b) Drainage and land use maps, required pursuant to N.J.A.C. 7:1E-4.3(b)5, shall:
 - 1. Include maps for the land area within 1,000 feet from the major facility's boundary. This boundary includes all lands owned or used by the owner or operator at a given location. The following categories of land use shall be included:
 - i. Urban land:
 - (1) Residential;
 - (2) Transportation/communication/utilities;
 - (3) Industrial and commercial complexes;
 - (4) Recreational land and parks;
 - (5) Schools; and
 - (6) Hospitals and nursing care facilities;
 - ii. Water:
 - (1) River channels;

- (2) Lakes and ponds;
- (3) Reservoirs;
- (4) Bays and estuaries; and
- (5) Cranberry bogs;
- iii. Wetlands:
 - (1) Coastal wetlands; and
 - (2) Interior wetlands;
- iv. Agricultural land:
- v. Barren lands:
 - (1) Beaches;
 - (2) Extractive mining;
 - (3) Other barren or altered lands; and
- vi. Forest:
 - (1) Deciduous;
 - (2) Coniferous;
 - (3) Mixed; and
 - (4) Brushland and shrubland;
- 2. Locate and label all arterial and collector sewers, storm sewers, catchment or containment systems or basins, diversion systems, and watercourses into which surface water run-off from the facility drains; and
- 3. Locate and label all water supply wells and well-head protection areas which have been delineated by the Department within 1,000 feet from the major facility's boundary.
- (c) Topographical maps showing environmentally sensitive areas, required pursuant to N.J.A.C. 7:1E-4.3(b)6, shall:
 - 1. Cover that area of the tertiary watershed in which the major facility is located which is downgradient or topographically lower than the highest land point within the major facility and which could be affected by a discharge as delineated in (c)2 below. At a minimum, this shall include the 100 year floodplain;
 - 2. Extend to the maximum area of potential impact, if that area is greater than the tertiary watershed. This area shall be the lesser of the following:
 - i. The distance and path an uncontrolled discharge would travel in 48 hours taking into account the largest tank, container, or vessel compartment utilized by the facility, the loss of secondary containment, consideration of containment measures in addition to secondary containment, the dispersivity of the hazardous substance, temperature extremes, average rainfall and stream flows, tidal cycles, prevailing winds, and potential threat to the environment. All floodprone areas

and water or wetlands features within the maximum area shall be included, at a minimum;

- ii. The distance downstream from the facility at which the concentration of the hazardous substance would fall below EPA's Quality Criteria for Water issued by EPA's Office of Water Regulations and Standards, including all floodprone areas around any surface water or wetlands features; or
- iii. Fifteen miles from the facility boundary, downgradient along the path a discharge would follow, including all floodprone areas around any surface water or wetland features; and
- 3. Include, at a minimum, the following types of environmentally sensitive areas:
 - i. Environmentally sensitive areas for which information concerning the existence and location of the area, sufficient to allow for the location of the area on the topographical map, is available from any of the following:
 - (1) The Department;
 - (2) Other government agencies and published sources listed by the Department, which lists are available from the Department upon request; or
 - (3) A review and interpretation of the photo basemap;
 - ii. Without limiting the generality of the foregoing, the Department has determined that information from the sources listed in (c)3i(1), (2) and (3) above is available for wetlands and wetland transition areas; bay islands and barrier island corridors; dunes; and areas designated as wild, scenic, recreational or developed recreational rivers; and
 - iii. The environmentally sensitive areas listed in (c)3iii(1) through (4) below:
 - (1) Of the surface waters listed in N.J.A.C. 7:1E-1.8(a)1, large rivers, medium rivers, streams, creeks, ponds, lakes and canals;
 - (2) Of the sources of water supply listed in N.J.A.C. 7:1E-1.8(a)2, intakes and wells;
 - (3) Beaches, as listed in N.J.A.C. 7:1E-1.8(a)4;
 - (4) Of the breeding areas and migratory stopover areas listed in N.J.A.C. 7:1E-1.8(a)7 and 8, those which are known to the ornithologist who certifies the DCR plan under N.J.A.C. 7:1E-4.11(e).
- (d) All maps required by N.J.A.C. 7:1E-4.3(b)4, 5 and 6 shall be submitted in hardcopy form, including two paper copies and, if mylar basemaps are used, two mylar copies. Such hard copies may be accompanied by a submission of the mapped information in digital form, at the option of the person required to submit the map.

- (e) An owner or operator may apply for an exemption from compliance with the mapping criteria set forth above.
 - 1. The application shall be in writing and shall contain the following:
 - i. A copy of a written estimate of the cost of preparing the required maps in accordance with the criteria set forth in this section; and
 - ii. An affidavit, signed and sworn to by the person required to provide certifications pursuant to N.J.A.C. 7:1E-4.11(c), stating that the owner or operator is a small business and that incurring the cost of obtaining maps in compliance with this section would substantially impair the owner or operator's ability to continue as a going concern.
 - 2. The owner or operator shall submit such certified financial statements as the Department requests.
 - 3. The Department shall grant the exemption if it determines that the cost of obtaining maps in compliance with this section would substantially impair the owner or operator's ability to continue as a going concern. The grant of the exemption shall set forth other mapping criteria, which the Department determines will satisfactorily serve the purposes of this subchapter.

7:1E-4.11 Certifications

- (a) Any person who submits a discharge cleanup organization registration, summary test results, plan, plan amendment, or plan renewal, or confirmation report to the Department shall include, as an integral part of the discharge cleanup organization registration, summary test results, plan, plan amendment or plan renewal, or confirmation report, the following certification, signed by the highest ranking individual with direct knowledge and overall responsibility for the information contained in the certified documents:
- "I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information."
- (b) In addition to the certification in (a) above, any person who submits a plan, plan amendment, plan renewal or transmission pipeline registration to the Department shall include, as an integral part of the plan, plan amendment, plan renewal or transmission pipeline registration, the following certification:
- "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this plan and all attached documents and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information."

- (c) The additional certification in (b) above shall be signed by the ranking official, as follows:
 - 1. For a corporation, a principal executive officer of at least the level of vice president;
 - 2. For a partnership or sole proprietorship, a general partner or the proprietor, respectively;
 - 3. For a municipality, the mayor or equivalent official;
 - 4. For a county, the county executive or equivalent official;
 - 5. For the State, an official of at least the rank of agency director; or
 - 6. For any other public agency, a principal executive officer or ranking elected official.
- (d) Notwithstanding the provisions of (b) above, the certification contained in (a) above shall be the only certification required if the individual required in (a) above to sign the certification is the same individual required in (c) above to sign the additional certification.
- (e) Any person submitting a DCR plan containing an environmentally sensitive areas protection plan, or submitting an amendment or renewal to the environmentally sensitive areas protection plan, shall include, as an integral part of the plan, plan amendment or plan renewal, a certification, signed by a marine biologist or aquatic biologist or ecologist or freshwater equivalent and an ornithologist stating that the environmentally sensitive areas protection plan identifies those environmentally sensitive areas that could be affected by a discharge from this facility and the seasonal sensitivity of those areas, provides for protection from, and mitigation of, any potentially adverse impact on the identified areas, and for an environmental assessment in the event of a discharge.

Case Notes

Comparison of regulation to similar federal regulations as basis for guidance in determining authority of Department of Environmental Protection. GATX Terminals Corp. v. Dept. of Environmental Protection, 86 N.J. 46, 429 A.2d 355 (1981).

SUBCHAPTER 5. DISCHARGE NOTIFICATION, RESPONSE AND REPORTING

7:1E-5.1 Scope

This subchapter prescribes the rules of the Department for notification and reporting of discharges of hazardous substances, the reporting of malfunctions of discharge detection systems, and response to discharges of hazardous substances. The following rules shall govern the procedures for notification of the Department, response to a discharge of a hazardous substance, and follow-up reporting.

7:1E-5.2 Notification of discharges which occurred before the January 23, 1980, amendments to the Act

- (a) All persons responsible for a discharge who know or suspect that a discharge has occurred prior to January 23, 1980 and who have not previously reported that discharge shall conduct a diligent inquiry and shall promptly upon completion of the diligent inquiry and discovery of a discharge notify the Department in writing of such discharge at the address given at N.J.A.C. 7:1E-5.8(e).
- (b) All persons responsible for a discharge pursuant to (a) above who previously reported a discharge which occurred prior to January 23, 1980, shall promptly correct or supplement the prior notice to the Department if any of the information in the prior notice is determined to be false, misleading or inaccurate, or if additional relevant information is discovered which has not been previously reported to the Department.

7:1E-5.3 Discharge notification

- (a) Immediately after a discharge commences, any person or persons responsible for a discharge who knows or reasonably should know of the discharge, shall immediately notify the Department at (609) 292–7172. In the event that this number is inoperable, any person or persons responsible for a discharge shall immediately notify the State Police at (609) 882–2000.
- (b) Notification received by the Department pursuant to (a) above within 15 minutes of the time that the person responsible for a discharge knew, or reasonably should have known, of the occurrence of a discharge shall be considered immediate. It shall be presumed that notification received by the Department more than 15 minutes after the person responsible for a discharge knew, or reasonably should have known, of the discharge is not immediate. The person responsible for the discharge may rebut this presumption by satisfying the requirement of N.J.A.C. 7:1E-5.6.
- (c) Any notification performed by any person responsible for a discharge pursuant to (a) and (b) above shall include, but not be limited to, the following information.
 - 1. The name, title, affiliation, address and telephone number of the person reporting the discharge;
 - 2. The location of the discharge, with as much specificity as the Department requests, and in any event with sufficient specificity to enable the Department to direct its agents and employees and any other person to the discharge site, including:
 - i. For discharges from sites located on land, the name of the site, the street address, the municipality, and the county;
 - ii. For discharges on, under or into water, the name of the water body, location of the discharge with reference to a fixed point or points, and a description of the area which the discharge may reach.
 - 3. The common name of the hazardous substance(s) discharged;

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- 4. An estimate of the quantity of each hazardous substance discharged, including best estimates if the quantities are unknown;
- 5. The date and time at which the discharge began, the date and time at which the discharge was discovered, and, if the discharge has ended, the date and time at which it ended;
- 6. The actions such person proposes to take to contain, clean up and remove the hazardous substance(s) discharged;
- 7. The name and address of any person responsible for the discharge.
- (d) A copy of the requirements in (c) above, printed in a conspicuous format, shall be displayed by the owner or operator of any vessel which is ordinarily docked in this State in a prominent place on the bridge or pilot house of any such vessel, and by the owner or operator or any onshore facility at any transfer areas and the operations center of any such facility.

Administrative correction to (a). See: 24 N.J.R. 581(a).

Case Notes

Commencing transfer operations of leaking gasoline in severe weather conditions that increased risk of discharge warranted civil administrative penalties. Department of Environmental Protection v. Stolt-Nielsen, 95 N.J.A.R.2d (EPE) 157.

7:1E-5.4 Notification of aircraft discharges

- (a) In the case of a discharge of a hazardous substance used as fuel from an aircraft into the airspace over the lands or waters of New Jersey, any person responsible for a discharge shall notify the Department at (609) 292–7172. In the event that this number is inoperable, any person or persons responsible for a discharge shall immediately notify the State Police at (609) 882–2000.
- (b) Any person responsible for a discharge who notifies the Department pursuant to (a) above shall report:
 - 1. The person causing the discharge;
 - 2. The amount of hazardous substance discharged;
 - 3. The time the discharge occurred;
 - 4. The location in the aircraft flight path of the discharge;
 - 5. The wind speed and direction; and
 - 6. The area likely to be affected by the discharge.

7:1E-5.5 Notification of malfunctions in discharge detection systems

(a) The owner or operator of a major facility shall immediately notify the Department at (609) 292–7172 of any malfunction of a discharge detection or other discharge monitoring, prevention or safety system or device. In the event that this number is inoperable, any owner or operator of a major facility shall immediately notify the State Police at (609) 882–2000.

- (b) Notification received by the Department pursuant to (a) above within 15 minutes of the time that the owner or operator knew, or reasonably should have known, of the occurrence of a malfunction shall be considered immediate. It shall be presumed that notification received by the Department more than 15 minutes after the owner or operator knew, or reasonably should have known, of the malfunction is not immediate. The owner or operator may rebut this presumption by satisfying the requirements of N.J.A.C. 7:1E-5.6.
- (c) Within two hours of the initial notification, the owner or operator of a major facility shall notify the Department that one of the following situations exists:
 - 1. The malfunction has been repaired;
 - 2. An alternate discharge detection system has been activated for the equipment utilizing the malfunctioning system; or
 - 3. The equipment protected by the discharge detection system has been taken out of service.

7:1E-5.6 Justification of delay

- (a) The Department, at its discretion, may determine that a period of longer than 15 minutes for initiating the notification of the Department of a discharge is immediate if the person responsible for the discharge can show, by clear and convincing evidence, that the notification of the Department was initiated as soon as possible or reasonable and that notification within 15 minutes was impossible or unreasonable because of:
 - 1. Essential immediate response activities;
 - 2. The circumstances under which the discharge occurred;
 - 3. The circumstances under which the discharge was first discovered; or
 - 4. Some other valid cause or reason.
- (b) A person who does not initiate the notification of the Department of a discharge within 15 minutes and who desires to establish that the notification was as immediate as reasonably possible under the circumstances in which the discharge occurred, shall submit a sworn affidavit so attesting with the written confirmation report required by N.J.A.C. 7:1E-5.8. This affidavit shall set forth the circumstances of the discharge to establish that the notification of the Department was as immediate as reasonably possible under the circumstances in which the discharge occurred. The affidavit shall be signed by the person or persons required to sign any certifications pursuant to N.J.A.C. 7:1E-4.11, and shall include, but not be limited to, the following information:

- 1. The address of the facility at which the discharge occurred;
- 2. The date and time at which the discharge began and the date and time at which it ceased;
- 3. The name, job title, affiliation, business telephone number and business address of the individual who first discovered the discharge;
- 4. The date, the time, and the circumstances under which the discharge was first discovered;
- 5. The reason(s), if any, why the discharge was not immediately discovered;
- 6. The date and time which the discharge was first reported to the Department;
- 7. The name, business telephone number, and business address of the individual who first notified the Department of the discharge;
- 8. Any reason why initiation of notification of the Department within 15 minutes of the onset of the discharge was impossible or unreasonable; and
- 9. A demonstration that initiation of notification was carried out as soon as possible or reasonable.

7:1E-5.7 Discharge response

- (a) Any person responsible for a discharge shall take immediate action to stop the discharge and shall take all necessary and appropriate measures to contain, mitigate, cleanup and remove the discharge, or shall follow the action plan in the facility's approved DCR plan, prepared and implemented in accordance with N.J.A.C. 7:1E-4. All persons shall coordinate such actions with the Department.
- (b) No person shall apply chemicals to a discharge without the prior approval of the Department or the Federal onscene coordinator under the National Contingency Plan pursuant to 40 CFR 300, unless such application is necessary to prevent or mitigate a situation that poses a serious and imminent threat to human life. In any such situation of imminent threat to human life, the owner or operator shall make reasonable efforts to secure the approval of the Department or the Federal on-scene coordinator before applying chemicals. Approval to apply chemicals may be obtained verbally, including by telephone. Application of chemicals pursuant to a DCR plan approved by the Department shall be deemed to have prior approval. Unauthorized use of chemicals shall be regarded as a discharge in violation of N.J.A.C. 7:1E–1.11.
- (c) Upon learning that a discharge of a hazardous substance has occurred, the Department may act to contain, mitigate, clean up and remove the discharge, unless it determines that such action will be done properly and expeditiously by the person responsible for the discharge, or by any other authorized person.

(d) The Department, at 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 cleanup and removal activities and other discharge-related operations if it determines that the person is not capable of properly containing, cleaning up or removing a discharge, or if the Department determines that person is failing to conduct cleanup operations in a proper and expeditious manner.

7:1E-5.8 Confirmation report

- (a) Any person responsible for a discharge reporting a discharge or leak detection system malfunction who has notified the Department pursuant to N.J.A.C. 7:1E-5.3 or 5.5 shall send to the Department a written confirmation report within 30 days of said notification.
- (b) Any person required to submit a confirmation report pursuant to (a) above shall include the following in the confirmation report:
 - 1. The name, address and telephone number of the individual that reported the discharge or discharge detection malfunction pursuant to N.J.A.C. 7:1E-5.3 or 5.5 above;
 - 2. The name, address and telephone number of the individual submitting the confirmation report if different from the individual identified in (b)1 above;
 - 3. If the person identified in (b)2 above is either not subject to the provisions of this subchapter, or is submitting the confirmation report on behalf of another person, the name, address, and telephone number of the person subject to the provisions of this subchapter for whom the confirmation report is being submitted;
 - 4. The name, address and telephone number of each person in any way responsible for the discharge;
 - 5. The name, address and telephone number of each owner and operator of the facility at which the discharge occurred, or the vessel or vehicle from which the discharge occurred;
 - 6. The source of the discharge, if known;
 - 7. The location of the discharge, as follows:
 - i. For discharge from sites located on land, the name of the site, the street address, the tax lot and block, the municipality, the county, any Department or EPA ID numbers of facilities involved, and a site map identifying the area in which the discharge occurred and the surrounding area;
 - ii. For discharges on, under or into water, the name of the water body, the latitude and longitude of the place the discharge originated, and a map identifying the areas affected by the discharge;

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- 8. A list of the common name and Chemical Abstract Service number of each of the hazardous substances discharged;
- 9. A list of the quantities of each hazardous substance discharged, including best estimates if the quantities are unknown;
- 10. The date and time at which the discharge began, the date and time at which the discharge was discovered, the date and time at which the discharge ended, and the date and time at which the Department was notified pursuant to N.J.A.C. 7:1E-5.3 or 5.5;
- 11. A detailed description of the measures taken to contain, cleanup and remove the discharge, summary of costs incurred, and proof of proper disposal of all hazardous substances discharged;
- 12. The corrective actions or countermeasures taken, including a description of equipment repairs or replacements;
- 13. Additional preventative measures taken or proposed to minimize the possibility of recurrence;
- 14. The name, addresses and telephone numbers of all entities involved in containment, cleanup or removal of the discharge;
- 15. A description of the type, quantity, location and date of all samples taken at or around the site of the discharge, whether before, during or after any containment, cleanup or removal;
- 16. The results of all analyses of samples described in (b)15 above; if the data are unavailable within 30 days due to laboratory delay, any person may apply to the Department at the address specified in N.J.A.C. 7:1E-5.8(d) and (e) for an extension of the deadline, not to exceed an additional 90 days; the decision as to whether or not to grant such an extension rests solely with the Department; the results shall include:
 - i. The name, address and telephone number of any person conducting sample analyses;
 - ii. Quality assurance/quality control procedures utilized for sample collection and analyses;
 - iii. Rationale for the location, number and frequency of samples collected;
 - iv. A detailed description of the sample methodology for all samples, as follows:
 - (1) Types of sample containers and closures, cleaning procedures of sample containers/closures and sampling equipment;
 - (2) Use of quality assurance samples (for example, blanks and duplicates);
 - (3) Groundwater monitoring well permit numbers, designs and installation techniques; and

- (4) Chain of custody procedures and sample documentation:
- v. A description of the analytical methodologies performed by parameter and rationale for selection of monitoring parameters and analytical methodologies; and
- vi. A list by parameter of the concentrations of each hazardous substance analyzed for;
- 17. For major facilities, a certification stating that financial responsibility demonstrated pursuant to N.J.A.C. 7:1E-4.5 and submitted to the Department pursuant to N.J.A.C. 7:1E-4.4(a)9 is in full force and effect;
- 18. Information supplementing any information previously provided to the Department if additional relevant information is discovered, or if it is determined that the information previously provided was false, inaccurate or misleading;
- 19. Any other information concerning the discharge which the Department may request; and
- 20. A fully executed certification pursuant to N.J.A.C. 7:1E-4.11.
- (c) Any person responsible for a discharge shall promptly notify the Department in writing of any additional or corrected information which becomes available after the submission of a confirmation report, within 10 days of the availability of that information. Such information shall reference the date, title and author of the confirmation report which is being supplemented.
- (d) Any person required to submit a confirmation report for a discharge at a major facility or transmission pipeline shall submit the confirmation report to:

Bureau of Discharge Prevention

New Jersey Department of Environmental Protection

401 East State Street

CN 027

Trenton, New Jersey 08625-0027

Attention: Discharge Confirmation Report

(e) Any person required to submit a confirmation report other than those referenced in (d) above shall submit the confirmation report to:

Hazardous Waste Enforcement Element

New Jersey Department of Environmental Protection

401 East State Street

CN 028

Trenton, New Jersey 08625-0028

Case Notes

Commencing transfer operations of leaking gasoline in severe weather conditions that increased risk of discharge warranted civil administrative penalties. Department of Environmental Protection v. Stolt-Nielsen, 95 N.J.A.R.2d (EPE) 157.

7:1E-5.9 Reporting responsibilities of the Department

- (a) Upon obtaining any information which leads it to suspect that a discharge has occurred in a municipality's jurisdiction, the Department shall immediately notify orally the contact persons for the governing body of the municipality and the local board of health as specified in (b) below, unless these entities have been notified previously.
- (b) The governing body of the municipality and the local board of health shall provide the Department with the name, address and telephone number of a 24 hour contact point and an alternate 24 hour contact point. The governing body of the municipality and the local board of health may change the contact point and alternate contact point upon written notice to the Department. If a contact point and an alternate contact point are not specified, the local police department or local fire department shall be the points designated by the Department to receive notification pursuant to (a) above.
- (c) Within 10 days of the initial oral notification required by (a) above, the Department shall issue a letter confirming and, if appropriate, expanding upon that initial oral notification.
- (d) The Department shall take appropriate action to verify that a discharge has occurred as suspected, including the authorization of agent(s) or officer(s) of the municipality or local board of health by an appropriate Department official to investigate the site of the suspected discharge. Such investigation shall include conducting visual assessment of the site of the discharge and contacting any persons potentially responsible for the discharge.
- (e) The agent(s) or officer(s) of the municipality shall report all findings to the Department.

7:1E-5.10 Discharge reporting requirements of local officials

- (a) When any governing body of a municipality or local board of health obtains information which leads it to suspect that a discharge has occurred, the governing body or local board of health shall immediately notify, as specified in (b) below, the Department, unless the Department has already been notified of the discharge.
- (b) The governing body or local board of health shall provide the Department with information regarding any discharge pursuant to (a) above in the format specified at N.J.A.C. 7:1E-5.3(a).

(c) The local governing body and the local board of health shall coordinate all responses to the discharge with the Department.

7:1E-5.11 Amendment of plans following a discharge

- (a) Following submission of a confirmation report pursuant to N.J.A.C. 7:1E-5.8, the Department may review a 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 chapter or that amendment of the plan is necessary to prevent and contain similar discharges.
- (b) Amendments required by the Department shall become part of the DPCC or DCR plan within 30 days after approval by the Department, unless the Department specifies another effective date. The owner or operator shall implement the amendment of the plan as soon as possible, in accordance with a schedule submitted by the owner or operator and approved by the Department.

SUBCHAPTER 6. CIVIL ADMINISTRATIVE PENALTIES AND REQUESTS FOR ADJUDICATORY HEARINGS

7:1E-6.1 Scope

This subchapter shall govern the Department's assessment of civil administrative penalties for violation of any provision of the Act, including any rule, regulation, plan, information request, access request, order or directive promulgated or issued pursuant to the Act. This subchapter shall also govern the procedures for requesting an adjudicatory hearing on a notice of civil administrative penalty assessment, an administrative order, conditions of approval for any plan, or amendment to a plan, or a denial or revocation of approval of a plan or amendment to a plan required under the Act.

7:1E-6.2 Applicability

- (a) The Department may assess a civil administrative penalty of not more than \$50,000 for any discharge less than 100,000 gallons, not more than \$10,000,000 for any discharge of 100,000 gallons or more, and not more than \$50,000 for each violation of the Act or of any rule, regulation, plan, information request, access request, order or directive promulgated or issued pursuant to the Act.
- (b) Each violation of any provision of the Act, or any rule, regulation, plan, information request, access request, order or directive promulgated or issued pursuant thereto shall constitute a separate and distinct offense.
- (c) Each day during which a violation continues shall constitute an additional, separate, and distinct offense.

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- (d) The Department may, in its discretion, treat an offense as a first offense solely for civil administrative penalty determination purposes, if the violator has not committed the same offense in the five years immediately preceding the date of the pending offense.
- (e) Neither the assessment of a civil administrative penalty nor the payment of any such civil administrative penalty shall be deemed to affect the availability of any other enforcement provisions provided for by the Act, or any other statute, in connection with the violation for which the assessment is levied.

7:1E-6.3 Procedures for issuance of administrative orders and assessment and payment of civil administrative penalties

- (a) In order to assess a civil administrative penalty under the Act, for violation of the Act or any rule, regulation, plan, information request, access request, order or directive promulgated or issued pursuant to the Act, the Department shall, by means of an administrative order or notice of civil administrative penalty assessment, notify the violator by certified mail (return receipt requested) or by personal service. The Department may, in its discretion, assess a civil administrative penalty for more than one offense in a single administrative order or notice of civil administrative penalty assessment or in multiple administrative orders or notices of civil administrative penalty assessment. This Administrative Order or Notice of Civil Administrative Penalty Assessment shall:
 - 1. Identify the section of the Act, rule, plan, request, order or directive violated;
 - 2. Concisely state the facts which constitute the violation:
 - 3. Order such violation to cease;
 - 4. Specify the amount of the civil administrative penalty to be imposed; and
 - 5. Advise the violator of the right to request an adjudicatory hearing pursuant to the procedures in N.J.A.C. 7:1E-6.4.
- (b) Payment of the civil administrative penalty is due upon receipt by the violator of the Department's Final Order in a contested case or when a Notice of Civil Administrative Penalty becomes a Final Order, as follows:
 - 1. If no hearing is requested pursuant to the procedures in N.J.A.C. 7:1E-6.4, a Notice of Civil Administrative Penalty Assessment becomes a Final Order on the 21st calendar day following receipt by the violator;
 - 2. If the Department denies the hearing request pursuant to the standards in the Administrative Procedures Act, N.J.S.A. 52:14B-1 et seq., a Notice of Civil Administrative Penalty Assessment becomes a Final Order upon receipt by the violator of such denial; or

- 3. If an adjudicatory hearing is conducted, a Notice of Civil Administrative Penalty Assessment becomes a Final Order upon receipt by the violator of a Final Order in a contested case.
- (c) If a civil administrative penalty is not paid within 30 calendar days of the date of a Final Order, and the penalty is not contested pursuant to N.J.A.C. 7:1E-6.4, or any payment pursuant to a payment schedule entered into with the Department is not made, an interest charge shall accrue on the amount of the penalty from the 30th calendar day that amount was due and owing.
- (d) If a civil administrative penalty is appealed pursuant to N.J.A.C. 7:1E-6.4, and the amount of the penalty is upheld, in whole or in part, a rate of interest shall be calculated on that amount as of the 30th calendar day from the date the amount was due and owing under the administrative order.
- (e) The rate of interest charged on any late penalty shall be that established by the New Jersey Supreme Court for interest rates on judgments, as set forth in the Rules Governing the Courts of the State of New Jersey.
- (f) The Department may assess and recover, by civil administrative order, the costs of any investigation, cleanup or removal, and the reasonable costs of preparing and successfully enforcing a civil administrative penalty. The assessment may be recovered at the same time as a civil administrative penalty, and shall be in addition to the penalty assessment.
- (g) Any person who violates a provision of the Act or a Court order issued pursuant thereto, or who fails to pay a civil administrative penalty in full or to agree to a schedule of payments therefor, shall be subject to a civil penalty not to exceed \$50,000 per offense. Any penalty so incurred may be recovered with costs in a summary proceeding pursuant to N.J.S.A. 2A:58-1 et seq. in the Superior Court or a municipal court.
- (h) Any conveyance used or intended for use in the willful discharge of a hazardous substance is subject to forfeiture to the State.

7:1E-6.4 Procedures for requesting and conducting adjudicatory hearings

(a) If the Department does not receive a hearing request within 20 calendar days after receipt by the violator of an administrative order or notice of civil administrative penalty assessment, conditions of approval for any plan, or amendment to a plan, or denial or revocation of approval of any plan or amendment being challenged, the Department shall deny the hearing request.

- (b) To request an adjudicatory hearing to contest an administrative order or notice of civil administrative penalty assessment issued pursuant to the Act, or conditions of approval for any plan, or amendment to a plan, or the denial or revocation of approval of any plan or amendment to a plan required pursuant to the Act, the violator shall submit the following information in writing to the Department of the address in (e) below:
 - 1. The name, address, and telephone number of the violator and its authorized representative;
 - 2. The violator's defenses to each of the Department's findings of fact in the administrative order or notice of civil administrative penalty assessment stated in short and plain terms;
 - 3. An admission or denial of each of the Department's findings of fact in the administrative order or notice of civil administrative penalty assessment, or denial or revocation of approval of a plan or amendment to a plan. If the violator is without knowledge or information sufficient to form a belief as to the truth of a finding, the violator shall so state and this shall have the effect of a denial. A denial shall fairly meet the substance of the findings denied. When the violator intends in good faith to deny only a part or a qualification of a finding, the violator shall specify so much of it as is true and material and deny only the remainder. The violator may not generally deny all of the findings, but shall make all denials as specific denials of designated findings. For each finding the violator denies, the violator shall allege the fact or facts as the violator believes it or them to be;
 - 4. Information supporting the request and specific reference to or copies of other written documents relied upon to support the request;
 - 5. An estimate of the time required for the hearing (in days and/or hours); and
 - 6. A request, if necessary, for a barrier-free hearing location for physically disabled persons.
- (c) If the violator fails to include all the information required by (b) above, the Department may deny the hearing request.
- (d) All adjudicatory hearings shall be conducted in accordance with the Administrative Procedures Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1.
 - (e) Requests for adjudicatory hearings shall be sent to:

Office of Legal Affairs

New Jersey Department of Environmental Protection

CN 402

Trenton, New Jersey 08625-0402 Attention: Hearing Request

7:1E-6.5 Civil administrative penalty determination—general

- (a) For violations other than those set forth in N.J.A.C. 7:1E-6.6 through 6.8, the Department may assess a civil administrative penalty for offenses described in this subchapter within the following ranges:
 - 1. Up to \$20,000 for the first offense;
 - 2. Up to \$35,000 for the second offense; and
 - 3. Up to \$50,000 for the third and each subsequent offense.
- (b) The Department may, in its discretion, set the amount determined pursuant to (a) above to assess a civil administrative penalty on the basis of the following factors:
 - 1. The compliance history of the violator;
 - 2. The number, frequency and severity of the offense(s);
 - 3. The measures taken by the violator to mitigate the effects of the current offense and to prevent future offenses;
 - 4. The deterrent effect of the penalty; or
 - 5. Other specific circumstances of the violator or offense.

7:1E-6.6 Civil administrative penalty for submitting inaccurate or false information

- (a) The Department may assess a civil administrative penalty against each violator who submits inaccurate information or who makes a false statement, representation, or certification in any DPCC plan, DCR plan, registration, record, or other document submitted or maintained, or who falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under the Act or any rule, regulation, plan, order or directive pursuant thereto.
- (b) Each time the violator submits inaccurate or false information to the Department shall be an additional, separate, and distinct offense.
- (c) The Department shall determine the amount of the civil administrative penalty for offenses described in this section based on the conduct of the violator as follows:
 - 1. For each intentional, deliberate, purposeful, knowing or willful act or omission by the violator, the civil administrative penalty, for each act or omission, is up to \$20,000 for the first offense, up to \$40,000 for the second offense, and up to \$50,000 for the third and each subsequent offense; and
 - 2. For all other conduct, the civil administrative penalty, for each act or omission, is up to \$1,000 for the first offense, up to \$2,000 for the second offense, and up to \$5,000 for the third and each subsequent offense.

7:1E-6.7 Civil administrative penalty for failure to allow lawful entry and inspection

- (a) The Department may assess a civil administrative penalty against each violator who refuses, inhibits or prohibits immediate lawful entry and inspection of any premises, building, vessel or place, except private residences, by an authorized Department representative.
- (b) Each day that a violator refuses, inhibits or prohibits immediate lawful entry and inspection of any premises, building, or place, except private residences, by an authorized Department representative, shall be an additional, separate and distinct offense.
- (c) The amount of the civil administrative penalty for offenses described in this section is up to \$10,000 for the first offense, up to \$20,000 for the second offense, and up to \$50,000 for the third and each subsequent offense.

7:1E-6.8 Civil administrative penalties for violations of rules adopted pursuant to the Act

- (a) Civil administrative penalties for offenses described in (c)2 and 4 below shall not be assessed until the time allotted under the applicable schedule for upgrading approved by the Department has expired.
- (b) Civil administrative penalties for offenses described in (c)2 and 4 below, exclusive of registration requirements, shall apply to major facilities only. All other civil administrative penalties shall apply to all persons.
- (c) The Department shall determine the amount of the civil administrative penalty for offenses described in this section on the basis of the provision violated and the frequency of the violation. The number of the following paragraphs corresponds to the number of the corresponding subchapter in N.J.A.C. 7:1E.
 - 1. The violations of N.J.A.C. 7:1E-1, General Provisions, and the civil administrative penalties for each violation are as set forth in the following table, unless modified by (d) below. In no case shall the assessed penalty be less than zero or more than the statutory limit.

Citation

N.J.A.C. 7:1E-1.11(a)

Base Penalty for each Violation

Gallons	Penalty		
>0-9	\$	500	
10-55	\$	1,000	
56-499	\$	2,000	
500-999	\$	3,000	
1 000-4 999	\$	5.000	

Category
of Offense ²
Inadequate secondary containment for an above ground
storage tank

Gallons		Penalty
5,000-9,999	¢	
	\$	7,500
10,000–19,999	Þ	10,000
20,000–29,999	3	15,000
30,000-39,999	\$	20,000
40,000–49,999	\$	25,000
50,000-59,999	\$	30,000
60,000–69,999	\$	35,000
70,000–79,999	\$	40,000
80,000-89,999	\$	45,000
90,000-99,999	\$	50,000
100,000–149,999	\$	75,000
150,000–199,999	\$	100,000
200,000–299,999	######################################	200,000
300,000-399,999	\$	400,000
400,000-499,999	\$	800,000
500,000-599,999	\$	1,000,000
600,000–699,999	\$	2,000,000
700,000–799,999	\$	3,000,000
800,000–899,999	\$	4,000,000
900,000–999,999	Š	5,000,000
1,000,000–1,999,999	\$	6,000,000
2,000,000-2,999,999	\$	7,000,000
3,000,000–3,999,999	\$	-8,000,000
4,000,000-4,999,999	\$	9,000,000
5 million or greater	φ.	10,000,000
of greater	JD .	10,000,000

The base penalty may be reduced or increased by applying the following factors¹:

Cause of Discharge	
Intentional or Gross Negligence	50% increase from base
Operational	No change from base
Accidental	50% reduction from base
Homeowner	75% reduction from base

Initiate Response to Discharge (from the time the discharge was detected or should have been detected)

THE COURSE OF SHOULD HAVE COURSE	
Poor—over 2 hours	20% increase from base
Fair—within 2 hours	No change from base
Good—within 1 hour	20% reduction from base
Excellent—within 15 minutes	40% reduction from base

Area of Impact Off the facility and into waters of the State

20% increase from base

Off the facility but not into waters of the State Contained on the facility

No change from base 40% reduction from base

Discharge History (Number of discharges not contained on the facility within the previous 12 months)

Five or more discharges 1-5 discharges Zero discharges 100% increase from base 50% increase from base No change from base

- ¹ The penalty for each violation is calculated by summing the base penalty and the resultant percentage of the base penalty for each of the four factors.
 - 2. The violations of N.J.A.C. 7:1E-2, Prevention and Control of Discharges at Major Facilities, and the civil administrative penalty amounts for each violation are as set forth in the following table, unless revised pursuant to (d) below:

Citation	First Offense	Second Offense	Subsequent Offense
2.2(a)1	\$20,000	\$40,000	\$50,000

				Third or
Category of Offense ² Failure to surface the base underlying a storage tank	Citation	First Offense	Second Offense	Subsequent Offense
with impermeable material	2.2(a)2	\$20,000	\$40,000	\$50,000
Failure to equip a pipe with remotely activated or readily accessible valves	2.2(a)3	\$10,000	\$20,000	\$50,000
Failure to perform integrity testing	2.2(a)4	\$15,000	\$30,000	\$50,000
Failure to submit summary test results	2.2(a)5	\$ 1,000	\$ 2,000	\$ 5,000
Improper design of heating coil system	2.2(c)	\$10,000	\$20,000	\$50,000
Failure to equip storage tanks with devices capable of detecting overfills and initiating shutdown mechanisms	2.2(d)	\$15,000	\$30,000	\$50,000
Failure to direct overfill lines into appropriate holding areas	2.2(e)	\$15,000	\$30,000	\$50,000
Failure to locate mobile or portable storage tanks in areas protected by secondary containment	2.2(f)	\$15,000	\$30,000	\$50,000
Location of mobile or portable storage tanks in areas subject to flooding or washout	2.2(f)	\$20,000	\$40,000	\$50,000
Failure to equip drum storage areas with adequate secondary containment	2.2(g)	\$15,000	\$30,000	\$50,000
Failure to surface a tank car or tank truck loading/un- loading area with impermeable material or to equip area with secondary containment	2.3(a)	\$20,000	\$40,000 ·	\$50,000
Failure to inspect the lowermost drain and all outlets of a tank car or tank truck prior to filling	2.3(b)	\$ 5,000	\$10,000	\$25,000
Failure to examine for leakage during filling and secure valves on all manifolds of a tank car or tank truck prior to departure	2.3(c)	\$ 5,000	\$10,000	\$25,000
Failure to provide a physical barrier, brake interlock or similar system in a transfer area	2.3(d)	\$10,000	\$20,000	\$50,000
Failure to attend a tank car at reasonable intervals during a transfer and during topping off	2.3(e)	\$10,000	\$20,000	\$50,000
Failure to attend a tank truck at all times during a transfer	2.3(e)	\$10,000	\$20,000	\$50,000
Failure to properly mark in-facility pipes	2.4(a)	\$ 5,000	\$10,000	\$25,000
Failure to double wall or have adequate secondary containment and a leak detention device for new buried in-facility pipes	2.4(b)	\$15,000	\$30,000	\$50,000
Failure to equip existing in-facility buried pipe with leak detection devices	2.4(b), (c)	\$15,000	\$30,000	\$50,000
Failure to examine exposed in-facility buried pipe and make necessary repairs or replacements	2.4(d)	\$15,000	\$30,000	\$50,000
Failure to upgrade in-facility pipe when required	2.4(d)	\$15,000	\$30,000	\$50,000
Failure to cap, blank-flange or physically remove infacility pipe removed from service	2.4(e)	\$10,000	\$20,000	\$50,000
Failure to minimize the chance of vehicular collision with in-facility pipe	2.4(g)	\$ 5,000	\$10,000	\$50,000
Improper design of a drainage system	2.5(a), (b)	\$15,000	\$30,000	\$50,000
Failure to provide for a hazardous substance which drained into process wastewater lines	2.5(b)	\$20,000	\$40,000	\$50,000
Inadequate or improper secondary containment	2.6(a), (b), (c)	\$20,000	\$40,000	\$50,000
Failure to maintain adequate containment devices	2.6(d), 2.7(b), (c)	\$10,000	\$20,000	\$50,000
Failure to deploy or maintain a containment device on standby when required	2.7(d), (e)	\$20,000	\$40,000	\$50,000
Failure to properly deploy a containment device	2.7(f), (g), (h)	\$15,000	\$30,000	\$50,000
Commencement or continuation of transfer operations during unacceptable conditions	2.7(i)	\$15,000	\$30,000	\$50,000
Failure to properly clean up and remove a discharge	2.7(;)	ቁ ን ስ ስስስ	¢40,000	ቀ ደብ ብብብ
prior to removing a containment device Failure to retrieve a containment device	2.7(j) 2.7(k)	\$20,000 \$ 5,000	\$40,000 \$10,000	\$50,000 \$25,000

Category	<u></u>	First	Second	Third or Subsequent
of Offense ² Improper or inadequate illumination	Citation 2.8	Offense \$15,000	Offense \$30,000	Offense \$50,000
Failure to protect a hazardous substance from being carried off or discharged into flood waters	2.9	\$20,000	\$40,000	\$50,000
Failure to conduct visual inspections	2.10(a)	\$10,000	\$20,000	\$50,000
Failure to keep documentation of visual inspections	2.10(b)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to implement a groundwater monitoring program	2.10(c)	\$20,000	\$40,000	\$50,000
Failure to keep hazardous substances in suitable containers	2.11(a)	\$10,000	\$20,000	\$50,000
Failure to protect hazardous substances from the elements and the possibility of leakage	2.11(a)	\$10,000	\$20,000	\$50,000
Failure to repair, replace or take out of service any leaking equipment	2.11(b)	\$10,000	\$20,000	\$50,000
Failure to clean up a leak or discharge of a hazardous substance	2.11(c), (d)	\$20,000	\$40,000	\$50,000
Failure to maintain a supply of safety equipment	2.11(e)	\$10,000	\$20,000	\$50,000
Failure to maintain secondary containment or diversion systems in good repair	2.11(f)	\$20,000	\$40,000	\$50,000
Failure to visually inspect flexible hoseline prior to each use and replace if necessary	2.11(g)	\$10,000	\$20,000	\$50,000
Failure to implement a training program	2.12(a), (b), (c), (d), (f)	\$15,000	\$30,000	\$50,000
Failure to keep documentation of all training	2.12(e)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to provide adequate security or to follow security procedures	2.13	\$ 5,000	\$10,000	\$25,000
Failure to establish standard operating procedures (SOPs)	2.14(d)	\$10,000	\$20,000	\$50,000
Failure to make copies of the SOPs or MSDS or fact sheets in all appropriate language readily available	2.14(a), (b), (c)	\$ 5,000	\$10,000	\$25,000
Failure to incorporate modifications of procedures into the SOPs prior to implementation	2.14(f)	\$ 5,000	\$10,000	\$25,000
Failure to maintain and make available a current index of SOPs	2.14(g)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to maintain required records	2.15	\$ 1,000	\$ 2,000	\$ 5,000

3. The violations of N.J.A.C. 7:1E-3, Transmission Pipelines, and the civil administrative penalty amounts for each violation, are as set forth in the following table, unless modified pursuant to (d) below:

Category of Offense ² Failure to register	Citation 3.2(a)	First Offense \$ 5,000	Second Offense \$10,000	Third or Subsequent Offense \$25,000
Failure to complete registration form	3.2(a)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to report a change in information	3.2(b)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to conform to 49 CFR 195	3.3	\$10,000	\$20,000	\$50,000
Failure to submit the required information	3.4	\$ 5,000	\$10,000	\$25,000

4. The violations of N.J.A.C. 7:1E-4, Plans and Registrations, and the civil administrative penalty amounts for each violation, are as set forth in the following table, unless modified pursuant to (d) below:

				Inira or
Category		First	Second	Subsequent
of Offense ²	Citation	Offense	Offense	Offense
Failure to register annually	$\frac{4.2(a)}{}$	\$ 5,000	\$10,000	\$25,000

Category		First	Second	Third or Subsequent
of Offense ²	Citation	Offense	Offense	Offense
Failure to complete registration form	4.2(a)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to appoint a response coordinator	4.3(a)	\$ 5,000	\$10,000	\$25,000
Failure to submit a DPCC or DCR plan	4.3(a), 4.4(a)	\$20,000	\$40,000	\$50,000
Failure to maintain on-site and make available any required plans or documentation	4.3(f), 4.7(g)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to have adequate cleanup equipment and personnel available	4.4(b)	\$10,000	\$20,000	\$50,000
Failure to demonstrate financial responsibility	4.5(a), (b)	\$15,000	\$30,000	\$50,000
Failure to notify of bankruptcy commencement	4.5(o)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to submit information when requested by the				
Department	4.6(f)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to submit an amendment	4.9(b)	\$ 5,000	\$10,000	\$25,000
Failure to provide notice of new construction, installation or modification	4.9(a)	\$ 1,000	\$ 4,000	\$ 5,000
Failure to renew DPPC/DCR plans	4.9(e)	\$ 5,000	\$10,000	\$25,000
Failure to provide any required certification	4.11	\$ 5,000	\$10,000	\$25,000

5. The violations of N.J.A.C. 7:1E-5, Notification, Response and Reporting, and the civil administrative

penalty amounts for each violation, are as set forth in the following table, unless modified pursuant to (d) below:

Category of Offense ² Failure to promptly notify the Department of a dis-	Citation	First Offense	Second Offense	Third or Subsequent Offense
charge	5.2(a)	\$10,000	\$20,000	\$50,000
Failure to immediately notify the Department of a discharge	5.3(a)	\$10,000	\$20,000	\$50,000
Failure to provide all required information upon notification	5.2(b), 5.3(c), 5.4(b)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to prominently display notification requirements	5.3(d)	\$ 5,000	\$10,000	\$25,000
Failure to notify the Department of a discharge of aircraft fuel	5.4(a)	\$ 5,000	\$10,000	\$25,000
Failure to notify of a malfunction in a leak detection system	5.5(a)	\$ 5,000	\$10,000	\$25,000
Failure to notify of the status of a malfunctioning discharge detection system	5.5(c)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to attempt to stop and contain a discharge or to follow the DCR action plan	5.7(a)	\$20,000	\$40,000	\$50,000
Failure to submit a confirmation report	5.8(a)	\$ 5,000	\$10,000	\$25,000
Failure to include all required information in a confirmation report	5.8(b), 5.8(c)	\$ 1,000	\$ 2,000	\$ 5,000
Failure to coordinate any remedial action with the Department	5.7(a)	\$ 5,000	\$10,000	\$25,000
Failure to file a requested amendment following a discharge	5.11(a)	\$ 5,000	\$10,000	\$25,000
² The column headed "Category of Offense" is descriptive in nature the column headed "citation" shall determine the specific violation.		sy reference of	nly. The rule	language cited in

- (d) The Department may modify the amount of a civil administrative penalty under (c) above, based upon any or all of the following:
 - 1. Mitigating or extenuating circumstances;
 - 2. The implementation of prevention measures in addition to those minimally required by applicable statute or rule;
- 3. The full payment by the violator of a specified part of the civil administrative penalty assessed if made within a time period established by the Department in an administrative order or notice of civil administrative penalty assessment and provided that the violator waives the right to request an adjudicatory hearing on the civil administrative penalty; or
- 4. Any other circumstances or conditions acceptable to the Department.

SUBCHAPTER 7. CONFIDENTIALITY CLAIMS

Source and Effective Date

R.1992 d.186, effective April 20, 1992. See: 23 N.J.R. 2848(a), 24 N.J.R. 1484(a).

7:1E-7.1 Procedure for making a claim

- (a) Any person required to submit information to the Department under this chapter, or allow the Department to obtain such information, which such person believes in good faith to constitute confidential information, may assert a confidentiality claim by following the procedures set forth in this subchapter.
- (b) A claimant shall submit to the Department (at the address provided in N.J.A.C. 7:1E-7.3) a confidential copy and, upon the Department's request, a preliminary public copy of any record containing assertedly confidential information. The preliminary public copy shall carry a notation stating that confidential information has been deleted. The Department may disclose the preliminary public copy to any person, without restriction or limitation.
- (c) The claimant shall label the first page of the confidential copy "CONFIDENTIAL COPY." At the top of each page of the confidential copy, which page contains information that the claimant asserts is confidential information, the claimant shall place a boldface heading reading "CONFIDENTIAL." The claimant shall clearly underscore or highlight all information in the confidential copy which the claimant asserts to be confidential, in a manner which shall be clearly visible on photocopies of the confidential copy.
- (d) The claimant shall seal the confidential copy in an envelope displaying the word "CONFIDENTIAL" in bold type or stamp on both sides. This envelope shall be enclosed in another envelope for transmittal to the Department. The outer envelope shall bear no markings indicating the confidential nature of the contents.
- (e) The claimant shall send the package containing the confidential copy to the Department by certified mail, return receipt requested, or by other means providing a receipt for delivery.
- (f) The claimant shall include in the package a written designation of a person to receive notices pursuant to N.J.A.C. 7:1E-7.2.

7:1E-7.2 Designation by claimant of an addressee for notices and inquiries

A claimant shall designate a person as the proper addressee of communications from the Department under N.J.A.C. 7:1E-7, 8, 9 and 10. To designate such a person, the claimant shall submit the following information to the Department in writing: the name and address of the claimant; the name, address, and telephone number of the designated person; and a request that all Department inquiries and communications (oral and written), including without limitation the inquiries and notices listed in N.J.A.C. 7:1E-7.3(a), be directed to the designee.

7:1E-7.3 Correspondence, inquiries and notices

- (a) The Department shall direct all correspondence, inquiries and notices to the person designated by the claimant pursuant to N.J.A.C. 7:1E-7.2, including without limitation the following:
 - 1. Notices requesting substantiation of claims, under N.J.A.C. 7:1E-8.2(a)1ii;
 - 2. Notices of denial of confidentiality claims and proposed disclosure of information, under N.J.A.C. 7:1E-8.5(a)1;
 - 3. Notices concerning shortened comment and/or waiting periods under N.J.A.C. 7:1E-9.3(a);
 - 4. Notices of disclosure under N.J.A.C. 7:1E-9.4; and
 - 5. Notices of proposed use of confidential information in administrative proceedings, under N.J.A.C. 7:1E-9.7.
- (b) A claimant shall direct all correspondence, inquiries, notices and submissions concerning confidentiality claims under this chapter to the Department at the following address:

Bureau of Discharge Prevention

New Jersey Department of Environmental Protection

CN 027

Trenton, New Jersey 08625-0027

SUBCHAPTER 8. CONFIDENTIALITY DETERMINATIONS

Source and Effective Date

R.1992 d.186, effective April 20, 1992. See: 23 N.J.R. 2848(a), 24 N.J.R. 1484(a).

7:1E-8.1 Time for making confidentiality determinations

- (a) The Department shall make a confidentiality determination:
 - 1. If the Department receives a request, by a person to whom the Department is restricted from disclosing confidential information pursuant to N.J.A.C. 7:1E-10, to inspect or copy records containing assertedly confidential information which is the subject of a confidentiality claim; or
 - 2. Before taking any action which is inconsistent with requirements for treatment of confidential information set forth in N.J.A.C. 7:1E-10.
- (b) The Department may, in its discretion, make a confidentiality determination at any time.

7:1E-8.2 Notice of initial confidentiality determination, and of requirement to submit substantiation of claim

- (a) If the Department initially determines that any of the assertedly confidential information may be confidential information, the Department shall:
 - 1. Notify each claimant who is known to have asserted a claim applicable to such information, and who has not previously been furnished with notice with regard to the information in question, of the following:
 - i. That the Department is in the process of making a confidentiality determination with respect to the claimant's claim:
 - ii. That the claimant is required to substantiate the claim as required by N.J.A.C. 7:1E-8.3;
 - iii. The address of the office to which the claimant's substantiation must be addressed:
 - iv. The time allowed for submission of substantiation, pursuant to N.J.A.C. 7:1E-8.4;
 - v. The method for requesting a time extension under N.J.A.C. 7:1E-8.4(b); and
 - vi. That a claimant's failure to furnish substantiation within the time allocated in N.J.A.C. 7:1E-8.4 shall operate as a waiver of the claimant's claim.
 - 2. Furnish, to any requester whose request for inspection or copying of the information is pending, notice that:
 - i. The information which is the subject of the request may be confidential information;
 - ii. The Department must undertake further inquiry before granting or denying the requester's request; and
 - iii. After the Department has made a confidentiality determination concerning the information which is the subject of the request, the Department will grant or deny the request.
- (b) The Department shall send the notice required by paragraphs (a)1 and 2 above by certified mail, return receipt requested, or by other means providing a receipt for delivery.
- (c) If the Department is able to determine whether all of the assertedly confidential information is or is not confidential information, without the need for submission of substantiation under N.J.A.C. 7:1E-8.3, such determination shall have the effect of a final confidentiality determination pursuant to N.J.A.C. 7:1E-8.5. The Department shall provide such notices of the determination as are required by N.J.A.C. 7:1E-8.5.

7:1E-8.3 Substantiation of confidentiality claims

(a) If the Department has determined that any assertedly confidential information may be confidential information,

- and notified the claimant pursuant to N.J.A.C. 7:1E-8.2(a) and (b), the claimant shall substantiate the confidentiality claim by submitting information to the Department in the following areas within the time allotted in N.J.A.C. 7:1E-8.4:
 - 1. Measures taken by the claimant to prevent disclosure of the information to others;
 - 2. The extent to which the information has been disclosed to others, and the precautions taken to prevent further disclosure;
 - 3. If the Department, EPA or any other agency has previously made a confidentiality determination relevant to the pending confidentiality claim, copies of all such confidentiality determinations;
 - 4. A description of any substantial harmful effects which disclosure would have upon the claimant's competitive position, an explanation of why such harmful effects are substantial, and an explanation of the causal relationship between disclosure and such harmful effects;
 - 5. The period of time for which the claimant desires that the Department treat the assertedly confidential information as confidential information; and
 - 6. Any other substantiation which is relevant in establishing that the assertedly confidential information is confidential information.
- (b) The claimant may assert a confidentiality claim for any information submitted to the Department by the claimant as part of his or her substantiation pursuant to this section. If the claimant fails to assert a confidentiality claim for such information at the time of submission, the claimant shall be deemed to have waived all such claims with respect to the information.

7:1E-8.4 Time for submission of substantiation

- (a) The claimant shall submit substantiation within 30 days after the date of the claimant's receipt of the written notice provided under N.J.A.C. 7:1E-8.2(a)1.
- (b) The Department may, in its discretion, extend the time allotted for submission of substantiation pursuant to (a) above if, before the expiration of the allotted time, the claimant submits a written request for the extension of such allotted time, provided, however, that except in extraordinary circumstances, the Department shall not approve such an extension of time in connection with a request to inspect or copy assertedly confidential information pursuant to N.J.S.A. 47:1A-1 et seq. without the consent of any person whose request to inspect or copy the allegedly confidential information under N.J.S.A. 47:1A-1 et seq. is pending.
- (c) If a claimant fails to submit substantiation within the time allotted pursuant to this section, the claimant shall be deemed to have waived all confidentiality claims with re-

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spect to the information for which the substantiation was required.

7:1E-8.5 Final confidentiality determination

- (a) If, after review of all the information submitted pursuant to N.J.A.C. 7:1E-8.2 and 8.3, the Department determines that the assertedly confidential information is not confidential information, the Department shall take the following actions:
 - 1. The Department shall so notify the claimant by certified mail, return receipt requested. The notice shall state the basis for the determination, that it constitutes final agency action concerning the confidentiality claim, and that the Department shall make the information available to the public on the 14th day following receipt by the claimant of the written notice. The notice shall include a copy of the final public copy to be made available to the public.
 - 2. On or after the 14th day following receipt by the claimant of the written notice required by (a)1 above, the Department shall send written notice of the determination to any requester with a pending request to inspect or copy the information which was the subject of the confidentiality claim. The Department shall send the notice by certified mail, return receipt requested.
- (b) If, after review of the substantiation submitted pursuant to N.J.A.C. 7:1E-8.3, the Department determines that the assertedly confidential information is confidential information, the Department shall treat such information as confidential information in accordance with N.J.A.C. 7:1E-10. The Department shall send written notice of the determination to the claimant and to any requester with a pending request to inspect or copy the information which was the subject of the confidentiality claim. The notice shall state the basis for the determination and that it constitutes final agency action. The Department shall send the notice by certified mail, return receipt requested.

7:1E-8.6 Treatment of information pending confidentiality determination

The Department shall treat assertedly confidential information as confidential information, until the Department has made a final determination that the assertedly confidential information is not confidential information.

7:1E-8.7 Availability of information to the public after determination that information is not confidential

If the Department determines that assertedly confidential information is not confidential information pursuant to N.J.A.C. 7:1E-8.5(a), the Department may disclose such information to any person on the date which is 14 days after the claimant's receipt of the written notice of the confidentiality determination.

7:1E-8.8 Preparation of final public copy

After the Department makes a final confidentiality determination that a record contains confidential information, the Department shall prepare a final public copy of the record based upon the final confidentiality determination. The Department may disclose the final public copy to any person, without restriction or limitation.

7:1E-8.9 Class confidentiality determinations

- (a) The Department may make a class confidentiality determination if the Department finds that the items of information within the class share one or more characteristics, which characteristics would cause the Department to determine consistently that such information is or is not confidential information.
- (b) A class confidentiality determination shall clearly identify the class of information to which it applies. Such identification shall include a list of the common characteristics shared by all information within the class.
- (c) A class confidentiality determination shall state that all of the information in the class is or is not confidential information.

7:1E-8.10 Classes of information which are not confidential information

- (a) Without limiting the ability of the Department to determine that information not listed in this section is not confidential information, the following types of information are not confidential information:
 - 1. The name, address and business telephone number of the owner or operator of a transmission pipeline, or of the registered agent of such owner or operator;
 - 2. The name, address and business telephone number of a facility and of its owner or operator and the registered agent of such owner or operator;
 - 3. Schedules of integrity testing for aboveground storage tanks required to be submitted under N.J.A.C. 7:1E-2.2(a)4, and information concerning the methods of testing:
 - 4. Test reports for aboveground storage tanks required to be submitted under N.J.A.C. 7:1E-2.2(a)5;
 - 5. Information contained in documentation of employee training, evaluation and qualifying activities required to be maintained under N.J.A.C. 7:1E-2.12(d);
 - 6. The storage capacity of a facility, the transfer capacity of a facility, and the types of hazardous substances present at a facility;
 - 7. Discharge cleanup information required to be submitted under N.J.A.C. 7:1E-3.4;
 - 8. All information required to be submitted by discharge cleanup organizations under N.J.A.C. 7:1E-4.2;

- 9. Lists of standard operating procedures required to be submitted under N.J.A.C. 7:1E-4.3(d)10;
- 10. Summaries of action plans required to be submitted under N.J.A.C. 7:1E-4.4(a)1;
- 11. Information concerning procedures for mobilizing equipment in the event of a discharge;
- 12. Names and titles of response coordinators and other persons authorized to hire contractors and release funds for discharge response, containment, cleanup and removal;
- 13. Information concerning proposed methods of disposal of material gathered during cleanups;
- 14. Housekeeping and maintenance records required to be made available under N.J.A.C. 7:1E-4.3(f)6;
 - 15. The locations of environmentally sensitive areas;
- 16. Certifications required under N.J.A.C. 7:1E-4.11, and the identity of any person signing such a certification;
- 17. Information which the Department is required to report under N.J.A.C. 7:1E-5.9; and
- 18. Information contained in an administrative order or notice of civil administrative penalty assessment under N.J.A.C. 7:1E-6.3.

SUBCHAPTER 9. DISCLOSURE AND USE OF CONFIDENTIAL INFORMATION

Source and Effective Date

R.1992 d.186, effective April 20, 1992. See: 23 N.J.R. 2848(a), 24 N.J.R. 1484(a).

7:1E-9.1 Disclosure of confidential information to other public agencies

- (a) The Department may disclose confidential information to any other state agency or to a Federal agency if:
 - 1. The Department receives a written request for disclosure of the information from a duly authorized officer or employee of the requesting agency;
 - 2. The Department notifies the other agency of any pending confidentiality claim concerning the requested information, or of any confidentiality determination regarding the requested information;
 - 3. The other agency has furnished to the Department a written opinion from the agency's chief legal officer or counsel stating that under applicable law the agency has the authority to compel the person who submitted the information to the Department (or allowed the Department to obtain such information) to disclose such information to the requesting agency;

- 4. The other agency has adopted regulations or operates under statutory authority that will allow it to preserve confidential information from unauthorized disclosure, and agrees in writing to refrain from disclosure and to safeguard the information in accordance with the requirements of N.J.A.C. 7:1E-10.1 and 10.2, unless:
 - i. The requesting agency has statutory authority both to compel production of the information and to disclose it; or
 - ii. The claimant has consented to disclosure of the information by the requesting agency; and
- 5. The requesting agency agrees not to disclose the information further unless:
 - i. The requesting agency has statutory authority both to compel production of the information and to make the proposed disclosure; or
 - ii. The claimant has consented to disclosure of the information by the requesting agency.

7:1E-9.2 Disclosure of confidential information to contractors

- (a) The Department may disclose confidential information to a contractor, if it complies with the procedure established under (b) below, and if:
 - 1. The Department determines that such disclosure is necessary in order for the contractor to perform the work required by the contract;
 - 2. The contract provides that the contractor and the contractor's employees shall use the confidential information only for the purpose of performing the duties required by the contract, shall refrain from disclosing the confidential information to anyone other than the Department, shall store all records containing the confidential information in locked cabinets in secure rooms, and shall return to the Department all originals and all copies of the information (and any abstracts or extracts therefrom, or any records containing any of the confidential information) when the confidential information is no longer necessary to enable the contractor to perform obligations under the contract, or at any time upon the request of the Department; and
 - 3. If the claimant so requests, the contractor contracts with the claimant to refrain from further disclosure of the confidential information.
- (b) Before disclosing confidential information to a contractor under (a) above, the Department shall notify the claimant of the proposed disclosure in writing, delivered by certified mail, return receipt requested, at least 14 days before making the disclosure. The notice shall state the information to be provided, the identity of the contractor, and the scheduled date of disclosure. If, at least three working days before the scheduled date of disclosure, the claimant delivers to the Department information sufficient

to establish that the proposed disclosure would be likely to cause more than nominal damage either to the claimant's competitive position or to national security, the Department shall refrain from making the disclosure.

7:1E-9.3 Disclosure to alleviate an imminent and substantial danger

- (a) If the Department finds that disclosure of confidential information would serve to alleviate an imminent and substantial danger to public health, safety or the environment, the Department may, in its discretion, take one or more of the following actions:
 - 1. Reduce the time allotted for providing substantiation pursuant to N.J.A.C. 7:1E-8.4, and notify the claimant of such reduction;
 - 2. Advance the date on which the Department may disclose information which the Department has determined is not confidential information, pursuant to N.J.A.C. 7:1E-8.5(a), and notify the claimant of such advance; or
 - 3. Immediately disclose the confidential information to any person whose role in alleviating the danger to public health and the environment makes such disclosure necessary. Any disclosure pursuant to this paragraph shall be limited to information necessary to enable the person to whom it is disclosed to carry out the activities in alleviating the danger. Any disclosure made pursuant to this paragraph shall not be deemed a waiver of a confidentiality claim and shall not be grounds for any determination that information is no longer confidential information.

7:1E-9.4 Notice to claimants of disclosure of confidential information

- (a) Promptly after the Department discloses confidential information pursuant to N.J.A.C. 7:1E-9.1, 9.2 or 9.3, the Department shall notify any claimant from whom the Department has obtained confidential information of the disclosure. Such notice shall be in writing, and shall contain the following information:
 - 1. The date on which disclosure was made;
 - 2. The name of the agency or other person to which the Department disclosed the confidential information; and
 - 3. A description of the confidential information disclosed.

7:1E-9.5 Disclosure by consent

- (a) The Department may disclose confidential information in accordance with the written consent of the claimant.
- (b) A claimant's consent to a particular disclosure shall not operate as a waiver of a confidentiality claim with regard to further disclosures, unless the authorized disclosure is of such nature that the disclosed information is no longer confidential information.

7:1E-9.6 Incorporation of confidential information into cumulations of data

Nothing in this chapter shall be construed as prohibiting the incorporation of confidential information into cumulations of data subject to disclosure as public records, provided that after consultation with the claimant, the Department has determined that such disclosure is not in a form that would foreseeably allow persons, not otherwise having knowledge of such confidential information, to deduce from it the confidential information or the identity of the person who supplied it to the Department.

7:1E-9.7 Disclosure of confidential information in rulemaking, permitting, and enforcement proceedings

- (a) Notwithstanding any other provision of this subchapter, the Department may disclose confidential information in rulemaking, permitting and enforcement proceedings.
- (b) The following procedures shall apply to the disclosure of confidential information by the Department in rulemaking, permitting and enforcement proceedings:
 - 1. The Department may disclose confidential information in an adjudicatory hearing, subject to the protection from making the information available to the public which the administrative law judge may impose under the Uniform Administrative Procedure Rules, N.J.A.C. 1:1 including without limitation N.J.A.C. 1:1–14.1.
 - 2. The Department may disclose confidential information in any enforcement, permitting, or rulemaking proceeding which does not involve an adjudicatory hearing, pursuant to the following procedure:
 - i. The Department shall inform the claimant that the Department is considering using the information in connection with the proceeding and shall afford the claimant a reasonable period for comment;
 - ii. The claimant shall submit comments to the Department within the time allotted pursuant to (b)2i above, concerning the proposed uses of confidential information, including comments which may support a determination that the confidential information is not relevant to the proceeding, or that the disclosure of the confidential information in the proceeding is not necessary to serve the public interest;
 - iii. The Department may disclose the confidential information in the proceeding if, upon consideration of comments submitted pursuant to (b)2ii above, the Department determines that the information is relevant to the subject of the proceeding, that the use of the information in the proceeding will serve the public interest, and that it materially impairs such service of the public interest to limit the use of the information to a manner which preserves its confidentiality; and

iv. The Department shall give the affected person at least five days notice prior to using the information in the proceeding in a manner which may result in the information being made available to the public.

7:1E-9.8 Hearing before disclosure of information for which a confidentiality claim has been made

(a) A claimant may request an adjudicatory hearing to contest disclosure of any information for which a confidentiality claim has been made, at any time before disclosure. The request shall be in accordance with the requirements of N.J.A.C. 7:1E-6.4(b), and shall be delivered to the Department at the following address:

Department of Environmental Protection
Office of Legal Affairs
Attention—Adjudicatory Hearing Requests—
DPCC Confidentiality
401 East State Street
CN 402
Trenton, New Jersey 08625–0402

- (b) The Department may deny a request for an adjudicatory hearing under (a) above if:
 - 1. The claimant fails to provide all information required under N.J.A.C. 7:1E-6.4(b);
 - 2. The Department receives the request after disclosure of the assertedly confidential information occurs;
 - 3. The Department has been ordered to disclose the information by a court of competent jurisdiction, or by any other person or entity with the power and authority to compel disclosure; or
 - 4. The Department determines that disclosure is necessary to alleviate an imminent danger to the environment or to public health or safety, as provided in N.J.A.C. 7:1E-9.3.
- (d) All adjudicatory hearings shall be conducted in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1.
- (e) At the adjudicatory hearing, the respondent shall have the burden of showing that the proposed disclosure is not in accordance with this chapter.
- (f) Pending the completion of the adjudicatory hearing, the Department will refrain from disclosing the assertedly confidential information, unless:
 - 1. The Department has been ordered to disclose the information by a court of competent jurisdiction, or by any other person or entity with the power and authority to compel disclosure; or

2. The Department determines that disclosure is necessary to alleviate an imminent danger to the environment or to public health or safety.

SUBCHAPTER 10. TREATMENT OF CONFIDENTIAL INFORMATION

Source and Effective Date

R.1992 d.186, effective April 20, 1992. See: 23 N.J.R. 2848(a), 24 N.J.R. 1484(a).

7:1E-10.1 Nondisclosure of confidential information

Unless specifically required by any Federal or State law, regulation or order, court order, or applicable court rule, the Department shall not disclose confidential information to any person other than as provided in N.J.A.C. 7:1E-9.

7:1E-10.2 Safeguarding of confidential information

- (a) Submissions to the Department required under this chapter will be opened only by persons authorized by the Department to be engaged in administering this chapter.
- (b) Only those Department employees whose activities necessitate access to information for which a confidentiality claim has been made may open any envelope which is marked "CONFIDENTIAL".
- (c) The Department shall store any records containing confidential information only in locked cabinets in secure rooms; provided, however, that if such records are in a form which is not amenable to such storage, the Department shall store such records in a manner which similarly restricts access by persons to whom disclosure of the confidential information in question is restricted.
- (d) Any records made, possessed, or controlled by the Department or its contractors, and containing confidential information, shall contain indicators identifying the confidential information.
- (e) Every Department employee, representative, and contractor who has custody or possession of confidential information shall take appropriate measures to safeguard such information and to protect against its improper disclosure.

7:1E-10.3 Confidentiality agreements

The provisions of this chapter shall supersede the provisions of any agreement imposing any duties of confidentiality or nondisclosure upon the Department or any employee, contractor or agent thereof. Such provisions imposing confidentiality or nondisclosure duties upon the Department of any employee, contractor or agent thereof shall be of no force or effect.

7:1E-10.4 Wrongful access or disclosure; penalties

- (a) No person shall disclose, obtain or have possession of any confidential information, except as authorized by this chapter.
- (b) Except in accordance with this chapter, no Department employee, representative, or contractor shall disclose any confidential information which came into his or her possession, or to which he or she gained access, by virtue of his or her official position of employment or contractual relationship with the Department. No such person shall use any such information for his or her private gain or advantage, except as permitted by a contract between such person and the Department. If a contractor discloses confidential information in violation of this chapter or of contractual provisions restricting disclosure, such disclosure shall constitute grounds for debarment or suspension as provided in N.J.A.C. 7:1–5, Debarment, Suspension and Disqualification from Department Contracting.
- (c) If the Department finds that any person has violated the provisions of this subchapter, it may:
 - 1. Commence civil action in Superior Court for a restraining order and an injunction barring that person from further disclosing confidential information; and/or
 - 2. Pursue any other remedy available at law or equity.
- (d) In addition to any other penalty that may be sought by the Department, violation of this subchapter by a Department employee shall constitute grounds for dismissal, suspension, fine or other adverse personnel action.
- (e) Use of any of the remedies specified under this section shall not preclude the use of any other remedy.

APPENDIX A

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION LIST OF HAZARDOUS SUBSTANCES (ALPHABETICAL LISTING)

Bottom sludge generated from the processing, blending, and treatment of waste oil in waste oil processing facilities.

Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.

Cyanidation wastewater tailing pond sediment

Name

from mineral metals recovery operations.

Name

CAS Number

Discarded unused formulations containing tritetra-, or pentachlorophenol or discarded unused formulation containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)

Leachate resulting from the treatment, storage, or disposal of wastes classified by more than one waste code under Subpart D, or from a mixture of wastes classified under Subparts C and D of this part. (Leachate resulting from the management of one or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its hazardous waste code(s): F020, F021, F022, F023, F026, F027 and/or F028.)

Oil spill cleanup residue which: A. is contaminated beyond saturation; or B. the generator fails to demonstrate that the spill material was not one of the listed hazardous waste oils.

Plating sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process.

Processes wastes, including but not limited to, distillation, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalized processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 261.31 or 261.32.)

Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.

Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.

Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.

Spent cyanide bath solutions from mineral metals recovery operations.

Spent cyanide plating bath solutions from electroplating operations.

Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. Spent stripping and cleaning bath solutions from electroplating operations where cyanides are

used in the process.

The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride. 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

CAS Number

Name
The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogentated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

The following used and unused waste oils: metal working oils; turbine lubricating oils; diesel lubricating oils; and quenching oils.

Waste automotive crankcase and lubricating oils from automotive service and gasoline stations, truck terminals, and garages.

Waste oil and bottom sludge generated by gasoline stations when gasoline and oil tanks are tested, cleaned, or replaced.

Waste oil and bottom sludge generated from tank cleanouts from residential/commercial fuel oil tanks.

Waste petroleum oil generated when tank trucks or other vehicles or mobile vessels are cleaned, including, but not limited to, oily ballast water from product transport units of boats, barges, ships, or other vessels.

Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical

CAS	Number	Name	CAS Number
CAL	- Trainiber	intermediate, or component in a formulating process) of tetra-, penta-, or hexachloroben-	CAS Number
		zenes under alkaline conditions. Wastes (except wastewater and spent carbon	
		from hydrogen chloride purification) from the production of materials on equipment previ-	
		ously used for the production or manufactur- ing use (as a reactant, chemical intermediate,	
		or component in a formulating process) of tri-	
		and tetrachlorophenols. (This listing does not include wastes from equipment used only	
		for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	
		Wastes (except wastewater and spent carbon	
•		from hydrogen chloride purification) from the production or manufacturing use (as a reac-	
		tant, chemical intermediate, or component in	
		a formulating process) of tri- or tetrachloro- phenol, or of intermediates used to produce	
		their pesticide derivatives. (This listing does not include wastes from the production of	
		Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	
		Wastewater treatment sludges from electro-	
		plating operations except from the following processes: (1) sulfuric acid anodizing of alu-	
		minum; (2) tin plating on carbon steel; (3)	
		zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating	
		on carbon steel; (5) cleaning/stripping associ- ated with tin, zinc and aluminum plating car-	
		bon steel, and (6) chemical etching and mill-	
		ing of aluminum. Wastewater treatment sludges from chemical	
		conversion coating of aluminum except from zirconium phosphating in aluminum can	
		washing when such phosphating is an exclu-	
		sive conversion coating process. Acenaphthene	83–32–9
		Acenaphthylene Acetaldehyde	208–96–8 75–07–0
		Acetamide	60–35–5
		Acetic acid Acetic anhydride	64–19–7 108–24–7
		Acetone	67-64-1
		Acetone cyanohydrin	75–86–5
		Acetone thiosemicarbazide Acetonitrile	1752–30–3 75–05–8
•		3–(alpha-acetonyl benzyl)–4–hydroxy-coumarin	75 05 0
	,	and salts	81–81–2
		Acetophenone	98–86–2 53 06 3
		2-Acetylaminofluorene Acetyl bromide	53–96–3 506–96–7
		Acetyl chloride	75–36–5
		1-Acetyl-2-thiourea	591-08-2
		Acrolein	107-02-8
		Acrylamide	79–06–1 79–10–7
		Acrylic acid Acrylonitrile	107–13–1
	•	Acrylyl chloride	814–68–6
		Adipic acid	124-04-9
		Adiponitrile	111-69-3
		Alachlor Alanine, 3–[p-bis(2–chlorethyl)amino]	15972–60–8
		phenyl]-,L-]	148-82-3
		Alar	1596-84-5

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Name	CAS Number	Name	CAS Number
Aldicarb	116-06-3	Antimony pentachloride	7647-18-9
Aldrin	309-00-2	Antimony pentafluoride	7783-70-2
Allyl alcohol	107-18-6	Antimony potassium tartrate	28300-74-5
	107-05-1	Antimony tribromide	7789–61–9
Allyl chloride			
Aluminum (fume or dust)	7429–90–5	Antimony trichloride	10025-91-9
Aluminum oxide fibrous forms	1344-28-1	Antimony trifluoride	7783–56–4
Aluminum phosphide	20859–73–8	Antimony trioxide	1309–64–4
Aluminum sulfate	10043-01-3	Antimycin A	1397-94-0
2–Aminoanthraquinone	117-79-3	Antu	86-88-4
4-Aminoazobenzene	60-09-3	Aroclor 1016	12674-11-2
	92-67-1	Aroclor 1221	11104-28-2
4-Aminobiphenyl			
1-Amino-2-methylanthraquinone	82–28–0	Aroclor 1232	11141–16–5
2-Amino-1-methylbenzene	95-53-4	Aroclor 1242	53469-21-9
4-Amino-1-methylbenzene	106–49–0	Aroclor 1248	12672–29–6
5-(Aminomethyl)-3-isoxazolol	2763-96-4	Aroclor 1254	11097-69-1
p-Aminopropiophenone	70-69-9	Aroclor 1260	11096-82-5
Aminopterin	54-62-6	Arsenic	7440-38-2
4–Aminopyridine	504-24-5	Arsenic acid	7778-39-4
			1110-39-4
N-Aminothioxomethyl acetamide	591-08-2	Arsenic compounds	4000 00 0
Amiton	78–53–5	Arsenic disulfide	1303-32-8
Amiton oxalate	3734–97–2	Arsenic (III) oxide	1303-36-2
Amitraz	33089-61-1	Arsenic pentoxide	1303-28-2
Amitrole	61-82-5	Arsenic trioxide	1327-53-3
Ammonia	7664–41–7	Arsenic trisulfide	1303-33-9
		Arsenous trichloride	
Ammonium acetate	631-61-8		7784–34–1
Ammonium benzoate	1863-63-4	Arsine	7784-42-1
Ammonium bicarbonate	1066–33–7	Arsonous dichloride, phenyl-	696–28–6
Ammonium bichromate	7789-09-5	Asbestos	1332–21–4
Ammonium biflouride	1341–49–7	Auramine	492-80-8
Ammonium bisulfite	10192-30-0	Avitrol	504-24-5
Ammonium carbamate	1111-78-0	Azaserine	115-02-6
Ammonium carbonate	506-87-6	Azinphos-ethyl	2642-71-9
Ammonium chloride	12125-02-9	Azinphos-methyl	86–50–0
Ammonium chromate	7788–98–9	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,	
Ammonium citrate, dibasic	3012-65-5	6-amino-8-[[(aminocarbonyl)oxy]methyl]	
Ammonium fluoborate	13826-83-0	-1,1a,2,8,8a,8b-hexahydro-8a-meth-	
Ammonium fluoride	12125-01-8	oxy-5-methyl,[1aS-(1aalpha,8beta,	
Ammonium hydroxide	1336–21–6	8aalpha,8balpha)]–	50-07-7
Ammonium hypophosphite	7803-65-8	Barium	7440–39–3
Ammonium nitrate	6484–52–2	Barium cyanide	542-62-1
Ammonium nitrate (solution)	6484-52-2	Bendiocarb (conc. above 15%)	22781-23-3
Ammonium oxalate	1113–38–8	Benomyl	17804–35–2
Ammonium persulfate	7727–54–0	3,4-Benzacridine	225-51-4
Ammonium picrate	131-74-8	Benz[c]acridine	225-51-4
Ammonium silicofluoride	16919–19–0	Benzal chloride	98-87-3
Ammonium sulfamate	7773-06-0	Benzamide	
			55-21-0
Ammonium sulfate (solution)	7783–20–2	1,2-Benzanthracene	56-55-3
Ammonium sulfide	12135-76-1	Benz[a]anthracene	56-55-3
Ammonium sulfite	10196-04-0	Benzenamine	62-53-3
Ammonium tartrate	3164-29-2	Benzenamine, 4,4'-carbonimidoylbis(N,N-	
Ammonium thiocyanate	1762-95-4	dimethyl-	492-80-8
Ammonium thiosulfate	7783–18–8	Benzenamine, 4-chloro- 2-methyl-, hydrochlo-	.,_ 00 0
Ammonium vanadate	7803-55-6	ride	2165 02 2
			3165–93–3
Amphetamine	300-62-9	Benzenamine, 2-methyl-	95–53–4
Amyl acetate	628-63-7	Benzenamine, 4-methyl-	106-49-0
iso-Amyl acetate	123-92-2	Benzenamine, 2-methyl-hydrochloride	636-21-5
sec-Amyl acetate	626-38-0	Benzenamine, 4-nitro-	100-01-6
tert-Amyl acetate	625-16-1	Benzenamine, 3-(trifluoromethyl)-	98–16–8
Aniline	62-53-3	Benzene	71–43–2
Aniline, 2,4,6–trimethyl–	88-05-1	Benzenearsonic acid	
			98-05-5
o–Anisidine	90-04-0	Benzene, 1-(chloromethyl)-4-nitro-	100-14-1
p-Anisidine	104–94–9	Benzenediamine, ar-methyl-	95–80–7
o-Anisidine hydrochloride	134-29-2		496-72-0
Anthracene	120-12-7		823-40-5
Antimony	7440-36-0		25376-45-8
Antimony compounds		1,2-Benzenedicarboxylic acid anhydride	85-44-9
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Nome	CAS Number	Name	CAS Number
Name 1,2–Benzenedicarboxylic acid, di-n-octyl ester	117-84-0	Bithionol	97–18–7
Benzene, 1,1'–(2,2–dichloroethylidene)	117 01 0	Bitoscanate	4044-65-9
bis[4-chloro-	72-54-8	2,2'-Bloxirane	1464-53-5
1,3-Benzenediol	108-46-3	Bomyl (conc. above 1%)	122-10-1
1,2-Benzenediol, 4-[1-hydroxy-2-(methylami-	E1 40 4	Boron trichloride	10294-34-5
no) ethyl]-	51-43-4 122-09-8	Boron trifluoride Boron trifluoride (conc. above 0.005%) (com-	7637–07–2
Benzeneethanamine, alpha, alpha-dimethyl- Benzene, hexahydro	110-82-7	pound with methyl ether (1:1))	353-42-4
Benzene, 1-methyl-1,2,4-dinitro-		Brodifacoum	56073-10-0
Benzene, 1-methyl-2,4-dinitro-	121–14–2	Bromadiolone	28772-56-7
Benzene, 1-methyl-2,6-dintro-	606–20–2	Bromine	7726–95–6
Benzene, 1,2-methylenedioxy-4-allyl-	94-59-7 94-58-6	Bromoacetone	506–68–3 598–31–2
Benzene, 1,2-methylenedioxy-4-propenyl- Benzene, 1,2-methylenedioxy-4-propyl	94-36-0	Bromoform	75-25-2
Benzenesulfonyl chloride	98-09-9	4–Bromophenyl phenyl ether	101-55-3
Benzenethiol	108-98-5	Bromoxynil	1689-84-5
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-		Bromoxynil butyrate	3861-41-4
meth- oxy-	72–43–5	Brucine	357573 106990
Benzidine Benzimidazole, 4,5–dichloro–2–(trifluoro-	92–87–5	1,3-Butadiene Butanoic acid, 4-[bis(2-chloroethyl)	100-99-0
methyl)-	3615-21-2	2-Butanone	78-93-3
1,2-Benzisothiazolin-3-one, 1,1-dioxide	81-07-2	2-Butanone, 3,3-dimethyl-1-(methylthio)-,	
1,2-Benzisothiazolin-3-one,1,1-dioxide, and		0-[methylamino) carbonyl] oxime	39196–18–4
salts		2-Butanone peroxide	1338-23-4
Benzo[a] anthracene	56-55-3 94-59-7	2-Butenal 2-Butenoic acid, 2-methyl-, 7-[[2,3-	4170–30–3
1,3–Benzodioxole, 5–(2–propenyl)– 1,3–Benzodioxole, 5–propyl–	94–39–7 94–58–6	dihydroxy-2-(1-methoxyethyl)-3-methyl-1-	
Benzo(b)fluoranthene	205-99-2	oxobutoxy] methyl]-2,3,5,7a-tetrahydro-	
Benzo(k)fluoranthene	207-08-9	1H-pyrrolizin-1-yl ester,[1S-(1alpha(Z),	
Benzo[j,k]fluorene	206-44-0	72S*,3R*),7aalpha]]-	303-34-4
Benzoic acid	65-85-0 100-47-0	Butyl acetate	123-86-4 110-19-0
Benzonitrile Benzo[rst]pentaphene	100–47–0 189–55–9	iso-Butyl acetate sec-Butyl acetate	105-46-4
Benzo[ghi]perylene	191–24–2	tert-Butyl acetate	540-88-5
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-		Butyl acrylate	141-32-2
oxo-1-phenyl-butyl)-, and salts, when present		n-Butyl alcohol	71–36–3
at concentrations greater than 0.3%	81–81–2 50–32–8	sec-Butyl alcohol	78–92–2 75–65–0
Benzo[a]pyrene p-Benzoquinone	30–32–8 106–51–4	tert-Butyl alcohol Butylamine	109-73-9
Benzotrichloride	98-07-7	iso-Butylamine	78–81–9
Benzoyl chloride	98-88-4	sec-Butylamine	13952-84-6
Benzoyl peroxide	94–36–0	tert-Butylamine	75–64–9
1,2-Benzphenanthrene	218-01-9	Butyl benzyl phthalate	85–68–7 106–88–7
Benzyl chloride Benzyl cyanide	100-44-7 140-29-4	1,2–Butylene oxide n-Butyl phthalate	84–74–2
Beryllium	7440-41-7	Butyraldehyde	123-72-8
Beryllium chloride	7787-47-5	Butyric acid	107926
Beryllium compounds	7440-41-7	iso-Butyric acid	79–31–2
Beryllium dust	7440-41-7	C.I. Acid Green 3	4680–78–8 569–64–2
Beryllium fluoride	7787–49–7 13597–99–4	C.I. Basic Green 4 C.I. Basic Red 1	989-38-8
Beryllium nitrate BHC	608-73-1	C.I. Direct Black 38	1937–37–7
alpha-BHC	319–84–6	C.I. Direct Blue 6	2602-46-2
beta-BHC	319-85-7	C.I. Direct Brown 95	16071-86-6
delta-BHC	319–86–8	C.I. Disperse Yellow 3	2832–40–8 3761–53–3
gamma-BHC	58–89–9	C.I. Food Red 5 C.I. Food Red 15	81–88–9
Bicyclo[2.2.1]heptane-2-carbonitrile, 5-chlo-ro-6-((((methyla	15271-41-7	C.I. Solvent Orange 7	3118-97-6
Biphenyl	92–52–4	C.I. Solvent Yellow 1	60-09-3
Bis(2-chloroethoxy) methane	111-91-1	C.I. Solvent Yellow 14	842-07-9
Bis(2-chloroisopropyl)ether	108-60-1	C.I. Solvent Yellow 3	97–56–3
Bis(chloromethyl) ether	542–88–1 108–60–1	C.I. Solvent Yellow 34 C.I. Vat Yellow 4	492–80–8 128–66–5
Bis(2-chloro-1-methylethyl)ether Bis(chloromethyl) ketone	108-60-1 534-07-6	Cacodylic acid	75-60-5
Bis(2-ethylhexyl) adipate	103-23-1	Cadmium	7440–43–9
Bis(2-ethylhexyl)phthalate	117-81-7	Cadmium acetate	543-90-8
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Name	CAS Number	Name	CAS Number
Cadmium bromide	7789-42-6	Chlorobenzilate	510-15-6
Cadmium chloride	10108-64-2	2-Chloro-1,3-butadiene	126-99-8
Cadmium compounds		4-Chloro-m-cresol epoxy-	
Cadmium oxide	1306–19–0	4-Chloro-m-cresol	59–50–7
Cadmium products	7440–43–9 2223–93–0	p-Chloro-m-cresol Chlorodibromomethane	59–50–7
Cadmium stearate Calcium arsenate	7778-44-1	Chloroethane	124–48–1 75–00–3
Calcium arsenite	52740–16–6	Chloroethyl chloroformate	627–11–2
Calcium carbide	75–20–7	2–Chloroethyl vinyl ether	110-75-8
Calcium chromate	13765-19-0	Chloroform	67–66–3
Calcium cyanamide	156-62-7	Chloromethyl ether	542-88-1
Calcium cyanide	592-01-8	Chloromethyl methyl ether	107-30-2
Calcium dodecylbenzenesulfonate	26264-06-2	2-Chloronaphthalene	91–58–7
Calcium hypochlorite Camphechlor	7778–54–3 8001–35–2	Chlorophacinone o-Chlorophenol	3691–35–8 95–57–8
Camphene, octachloro-	8001-35-2	4–Chlorophenyl phenyl ether	7005-72-3
Cantharidin	56-25-7	1–(o–Chlorophenyl)thiourea	5344-82-1
Captafol	2939-80-2	Chloroprene	126-99-8
Captan	133-06-2	3–Chloropropionitrile	542-76-7
Carbachol chloride	51-83-2	Chlorosulfonic acid	7790–94–5
Carbamic acid, methyl-, 0–(((2,4–dimethyl–1,		Chlorothalonil	1897–45–6 ·
3-dithiolan-2-y	26419–73–8	4-Chloro-o-toluidine hydrochloride	3165–93–3
Carbamic acid, methylnitroso-, ethyl ester	615-53-2	Chloroxuron	1982-47-4
Carbamide, N-ethyl-N-nitroso-	759–73–9	Chloryticos	2921-88-2
Carbamide, N-methyl-N-nitroso- Carbamide, thio-	684–93–5 62–56–6	Chlorthiophos Chromic acetate	21923–23–9 1066–30–4
Carbamindoselenoic acid	02-30-0	Chromic acid	1333-82-0
Carbaryl	63-25-2	Chromic acid, calcium salt	13765-19-0
Carbofuran	1563-66-2	Chromic chloride	10025-73-7
Carbon bisulfide	75-15-0	Chromic sulfate	10101-53-8
Carbon disulfide	75-15-0	Chromium	7440-47-3
Carbonic acid, dithallium(I) salt	6533-73-9	Chromium compounds	_
Carbonic dichloride	75–44–5	Chromous chloride	10049-05-5
Carbonic difluoride	353-50-4	Chrysene	218-01-9
Carbon oxyfluoride	353-50-4	Cobalt	7440–48–4
Carbon tetrachloride Carbonyl chloride	56-23-5 75-44-5	Cobalt carbonyl Cobalt, ((2,2'–(1,2–ethanediylbis (nitrilomethyli-	10210–68–1
Carbonyl fluoride	353-50-4	dyne))bis(6–	62207-76-5
Carbonyl sulfide	463-58-1	Cobaltous bromide	7789–43–7
Carbophenothion	786196	Cobaltous formate	544-18-3
Catechol	120-80-9	Cobaltous sulfamate	14017-41-5
Chloramben	133-90-4	Coke Oven Emissions	
Chlorambucil	305-03-3	Coking: ammonia still lime sludge from coking	
Chloranil	116–29–0	operations	_
Chlordane (Technical Mixture and Metabolites)	57-74-9 57-74-9	Coking: decanter tank far sludge from coking operations	
Chlordane, alpha & gamma isomers	57-74-9	Colchicine	64-86-8
Chlordane, technical	3, 74 3	Copper	7440–50–8
Chlordimeform	6164-98-3	Copper arsenate	10103-61-4
Chlorfenvinfos	470-90-6	Copper compounds	_
Chlorinated benzenes		Copper cyanide	544-92-3
Chlorinated ethanes		Coumafuryl (conc. above 3%)	117–52–2
Chlorinated naphthalene		Coumaphos	56-72-4
Chlorinated phenols Chlorine	7882–50–5	Coumatetralyl Creosote	5836-29-3
Chlorine cyanide	506–77–4	p-Cresidine	8001–58–9 120–71–8
Chlorine dioxide	10049-04-4	Cresol(s)	1319–77–3
Chlormephos	24934–91–6	m-Cresol	108-39-4
Chlormequat chloride	999-81-5	Cresol (mixed isomers)	1319-77-3
Chlornaphazine	494-03-1	o-Cresol	95–48–7
Chloroacetaldehyde	107-20-0	p-Cresol	106-44-5
Chloroacetic acid	79–11–8	Crimidine	535-89-7
2-Chloroacetophenone	532–27–4	Crotonaldehyde	4170–30–3
Chloroalkyl Ethers p-Chloroaniline	 106-47-8	Cumene hydronorovide	98-82-8
p-Chlorodanime Chlorobenzene	106–47–8 108–90–7	Cumene hydroperoxide Cupferron	80–15–9 135–20–6
CITICI OUCILLOIIO	100-30-/	Cupiciton	135-20-6

Name	CAS Number	Name	CAS Number
Cupric acetate	142-71-2	2,4-Diaminoanisole	615-05-4
Cupric acetoarsenite	12002-03-8	2,4-Diaminoanisole sulfate	39156-41-7
Cupric chloride	7447–39–4	4,4'-Diaminodiphenyl ether	101-80-4
Cupric nitrate	3251-23-8	2,4-Diaminotoluene	95–80–7
Cupric oxalate	5893-66-3	Diaminotoluene (mixed isomers) Diazinon	25376-45-8
Cupric sulfate Cupric sulfate, ammoniated	7758–98–7 10380–29–7	Diazonon Diazomethane	333–41–5 334–88–3
Cupric tartrate	815–82–7	1,2:5,6–Dibenzanthracene	53-70-3
Cyanazine	21725-46-2	Dibenz[a,h]anthracene	53-70-3
Cyanide	57–12–5	Dibenzo[a,h]anthracene	53-70-3
Cyanide compounds		Dibenzofuran	132-64-9
Cyanides (soluble salts and complexes), not		1,2:7,8-Dibenzopyrene	189-55-9
otherwise specified	_	Dibenz[a,i]pyrene	189-55-9
Cyanogen	460–19–5	Diborane	19287-45-7
Cyanogen bromide	506-68-3	1,2-Dibromo-3-chloropropane	96–12–8
Cyanogen chloride	506-77-4	di-n-butyl phthalate	84-74-2
Cyanogen iodide	506-78-5	Dicamba Dichlobenil	1918-00-9
Cyanophos Cyanuric fluoride	2636–26–2 675–14–9	Dichlone	1194–65–6
1,4–Cyclohexadienedione	0/3-14-9	m-Dichlorobenzene	117–80–6 541–73–1
2,5-Cyclohexadiene-1,4-dione	106-51-4	S–(2,3–Dichloroallyl)diisopropylthiocarbamate	2303–16–4
Cyclohexane	110-82-7	Dichlorobenzene	25321–22–6
Cyclohexanone	108-94-1	1.2-Dichlorobenzene	95-50-1
Cycloheximide	66-81-9	1,3-Dichlorobenzene	541-73-1
Cyclohexylamine	108-91-8	1,4-Dichlorobenzene	106-46-7
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	m-Dichlorobenzene	_
Cyclophosphamide	50-18-0	Dichlorobenzene (mixed isomers)	25321-22-6
Cyhexatin	13121-70-5	o-Dichlorobenzene	95-50-1
2,4–D Esters	94–11–1	p-Dichlorobenzene	106-46-7
	94-79-1	Dichlorobenzidine	91-94-1
	94-80-4	Dichlorobromomethane	75–27–4 764–41–0
	1320–18–9 1928–38–7	1,4-Dichloro-2-butene Dichlorodifluoromethane	75-71-8
	1928-61-6	3,5-Dichloro-N (1,1-dimethyl-2-propynyl)	73-71-0
	1929-73-3	benzamide	23950-58-5
	2971-38-2	Dichlorodiphenyldichloroethane	72–54–8
	25168-26-7	Dichloro diphenyl trichloroethane	50-29-3
	53467-11-1	1,1-Dichloroethane	75-34-3
2,4–D, salts and esters		1,2-Dichloroethane	107-06-2
2,4–D butoxyethanol ester (conc. above 20%)	1929–73–3	1,1-Dichloroethylene	75–35–4
2,4-D Diethanolamine salt (conc. above 20%)	5742–19–18	1,2-Dichloroethylene	540-59-0
2,4-D Dimethylamine salt (conc. above 20%)	2008-39-1	1,2-Dichloroethylene (E)	156-60-5
2,4–D Ethyl ester	533-23-3	Dichloroethylenes (mixture)	25323-30-2
2,4-D 2-ethylhexyl ester	1928-43-4	Dichloroethyl ether	111–44–4 108–60–1
2,4-D isooctyl ester (conc. above 20%)	25168-26-7 94-11-1	Dichloroisopropyl ether Dichloromethane	75-09-2
2,4–D, isopropyl ester 2,4–D Methyl ester	1928–38–71	Dichloromethoxy ethane	111-91-1
2,4–D whethyl esters 2,4–D, mixed butyl esters	94-80-4	Dichloromethyl ether	542-88-1
2,4–D mixed isobutyl esters	1713–15–1	Dichloromethylphenylsilane	149-74-6
2,4-D, Propylene glycol butyl ether esters (conc.	1710 10 1	2,4–Dichlorophenol	120-83-2
above 20%)	1928-45-6	2,6-Dichlorophenol	87-65-0
2,4-D Sodium salt (conc. above 20%)	2702-72-9	(2,4-Dichlorophenoxy) acetic acid	94-75-7
Daminozide	1596-84-5	2,4-Dichlorophenoxyacetic acid, salts and esters	
Daunomycin	20830-81-3	Dichlorophenylarsine	696–28–6
DDE	72–55–9	Dichloropropane	26638-19-7
11,17–Dimethoxy–18–[(3,4,5– trimethoxyben-		1,1-Dichloropropane	78-99-9
zoyl)oxy]-methyl ester, (3Beta, 16beta,		1,3-Dichloropropane	142–28–9
17alpha, 18beta, 20alpha)-yohim-ban-16-	50 55 F	n-2,3 Dichloropropanol	616-23-9
carboxylic acid	50–55–5	Dichloropropene (s) (mixtures)	542–75–6 26952–23–8
DDT metabolites	17702–41–9	Dichloropropene(s) (mixtures) 1,3–Dichloropropene	26952-23-8 542-75-6
Decaborane(14) Decabromodiphenyl oxide	1163-19-5	2,3-Dichloropropene	78–88–6
Demeton	8065-48-3	Dichloropropene–Dichloropropene (mixture)	8003-19-8
Dialifor	10311-84-9	2,2–Dichloropropionic acid	75–99–0
Di-allate	2303-16-4	1,3–Dichloropropylene	542-75-6
Diamine	302-01-2	Dichlorvos	62-73-7

Name	CAS Number	Name	CAS Number
Dicofol	115-32-2	Diphenylamine	122-39-4
Dicrotophos	141–66–2	Diphenylhydrazine	122–66–7
Dieldrin	60-57-1	1,2–Diphenylhydrazine	122–66–7
1,2:3,4-Diepoxybutane	1464–53–5	Diphosphoric acid, tetraethyl ester	107–49–3
Diepoxybutane	1464–53–5	Dipropylamine	142–84–7
Diethanolamine	111-42-2	Di-n-propylnitrosamine	621–64–7
Diethylamine	109-89-7	Diquat	85-00-7
Diethylarsine	692–42–2	Disulfoton	298-04-4
Diethylcarbamazine citrate	1642-54-2	Dithiazanine iodide	514-73-8
Diethyl chlorophosphate N,N'-Diethylhydrazine	814-49-3	Dithiobiuret	541–53–7
	1615-80-1	2,4-Dithiobiuret	32976–88–8
O,O-Diethyl S-methyl dithiophosphate Diethyl-p-nitrophenyl phosphate	3288-58-2 311-45-5	Dithiopyrophosphoric acid, tetraethyl ester Diuron	330-54-1
Diethyl phthalate	84–66–2	Dodecylbenzenesulfonic acid	27176-87-0
O,O-Diethyl O-pyrazinyl phosphorothioate	297-97-2	EBDCs	2/1/0-6/-0
Diethylstilbestrol	56–53–1	Emetine, dihydrochloride	316-42-7
Diethyl sulfate	64-67-5	Endosulfan	115-29-7
Digitoxin	71–63–6	alpha-Endosulfan	959–98–8
Diglycidyl ether	2238-07-5	beta-Endosulfan	33213-65-9
Digoxin	20830-75-5	Endosulfan metabolites	-
1,2–Dihydro–3,6–pyradizinedione	123–33–1	Endosulfan sulfate	1031-07-8
Dihydrosafrole	94–58–6	Endothall	145-73-3
Dimefox	115-26-4	Endothion	2778-04-3
Dimethoate	60-51-5	Endrin	72–20–8
3,3'-Dimethoxybenzidine	119-90-4	Endrin aldehyde	7421-93-4
Dimethylamine	124-40-3	Endrin metabolites	_
Dimethylaminoazobenzene	60-11-7	Epichlorohydrin	106-89-8
N,N-Dimethylaniline	121-69-7	Epinephrine	51-43-4
7,12-Dimethylbenz[a]anthracene	57-97-6	EPN -	2104-64-5
3,3'-Dimethylbenzidine	119–93–7	2,3-Epoxy-1-propanol	556-52-5
alpha, alpha-Dimethylbenzylhydroperoxide	80–15–9	Ergocalciferol	50-14-6
Dimethylcarbamyl chloride	79–44–7	Ergotamine tartrate	379–79–3
Dimethyldichlorosilane	75–78–5	Ethanal	75-07-0
Dimethylhydrazine	57–14–7	Ethanamine, 1,1-dimethyl-2-phenyl-	122-09-8
1,2-Dimethylhydrazine	540–73–8	Ethanedinitrile	460–19–5
3,3-Dimethyl-1-(methylthio)-2-butanone,	20106 10 4	1,2-Ethanediylbiscarbamodithioic acid	
O-[(methylamino) carbonyl] oxime	39196–18–4	Ethane, 1,1'-[methylenebis(oxy)] bis(2-chloro-	111–91–1
Dimethylnitrosamine	62-75-9	Ethanenitrile	75-05-8
alpha, alpha-Dimethylphenethylamine	122-09-8	Ethanesulfonyl chloride, 2-chloro-	1622–32–8
2,4–Dimethylphenol Dimethyl-p-phenylenediamine	105–67–9 99–98–9	Ethanethioamide	62–55–5
Dimethyl phosphorochloridothioate	2524-03-0	Ethanol, 1,2-dichloro-, acetate Ethanol, 2,2'-(nitrosoimino)bis-	10140-87-1 1116-54-7
Dimethyl phthalate	131-11-3	Ethanoyl chloride	75–36–5
Dimethyl sulfate	77–78–1	Ethenamine, N-methyl-N-nitroso-	15-50-5
Dimetilan	644–64–4	Ethene, trans-1,1-dichloro-	
Dinitrobenzene (mixed isomers)	25154-54-5	Ethion	563-12-2
m-Dinitrobenzene	99-65-0	Ethoprophos	13194-48-4
o-Dinitrobenzene	528-29-0	2–Ethoxyethanol	110-80-5
p-Dinitrobenzene	100-25-4	N-4-Ethoxyphenyl acetamid	62-44-2
4,6-Dinitro-o-cresol	534-52-1	Ethyl acetate	141–78–6
4,6-Dinitro-o-cresol and salts		Ethyl acrylate	140–88–5
Dinitrophenol	25550-58-7	Ethylbenzene	100-41-4
2,4-Dinitrophenol	51-28-5	Ethylbis(2-chloroethyl)amine	538-07-8
2,5–Dinitrophenol	329–71–5	Ethyl carbamate	51-79-6
2,6–Dinitrophenol	573–56–8	Ethyl chloroformate	541-41-3
Dinitrotoluene	25321–14–6	Ethyl cyanide	107-12-0
2,4-Dinitrotoluene	121–14–2	Ethylenebis(dithiocarbamic acid)	
2,6-Dinitrotoluene	606-20-2	Ethylenebisdithiocarbamic acid, salts & esters	111–54–6
3,4-Dinitrotoluene	610–39–9	Ethylenediamine	107–15–3
Dinocap	39300-45-3	Ethylenediamine-tetraacetic acid (EDTA)	60-00-4
Dinoseb	88-85-7	Ethylene dibromide	106-93-4
Dinoterb Dinoctri phthelete	1420-07-1	Ethylene dichloride	107-06-2
Di-n-octyl phthalate	117-84-0	Ethylene fluorohydrin	371–62–0
1,4–Dioxane Dioxathion	123-91-1	Ethylene glycol	107-21-1
Diphacinone	78–34–2 82–66–6	Ethylene oxide	75–21–8
Diphaemone	02-00-0	Ethylenimine	151–56–4

Name	CAS Number	Name	CAS Number
Ethyl ether	60–29–7	Haloethers	-
Ethylidene dichloride	75–34–3	Halomethanes	
Ethyl methacrylate	97–63–2	Heptachlor	76–44–8
Ethyl methanesulfonate	62-50-0 542-90-5	Heptachlor (and epoxide)	76-44-8
Ethylthiocyanate Explosives: pink/red water from TNT operation		Heptachlor epoxide	1024–57–3
Explosives: spent carbon from the treatment of		Heptachlor metabolites Hexachlorobenzene	118–74–1
wastewater containing explosives		Hexachloro–1,3–butadiene	87-68-3
Explosives: wastewater treatment sludges from		Hexachlorobutadiene	87–68–3
the manufacturing and processing of explo-		Hexachlorocyclohexane (all isomers)	606–73–1
sives		Hexachlorocyclohexane (gamma isomer)	58-89-9
Explosives: wastewater treatment sludges from		Hexachlorocyclopentadiene	77-47-4
the manufacturing formulation and loading of		Hexachloroethane	67-72-1
lead-based initiating compounds	50 05 7	Hexachlorohexahydro-exo, exodimethanona-	
Famphur	52-85-7	phthalene	
Fenaminosulf (conc. above 5%)	140-56-7 22224-92-6	Hexachloronaphthalene	1335-87-1
Fenamiphos Fenitrothion	122-14-5	Hexachlorophene	70–30–4
Fensulfothion	115-90-2	Hexachloropropene	1888-71-7
Fenthion (conc. above 0.5%)	55–38–9	Hexaethyl tetraphosphate Hexamethylenediamine, N,N'-dibutyl-	757–58–4 4835–11–4
Ferric ammonium citrate	1185-57-5	Hexamethylphosphoramide	680–31–9
Ferric ammonium oxalate	2944-67-4	Hydrazine	302-01-2
	55488-87-4	Hydrazine sulfate	10034-93-2
Ferric chloride	7705–08–0	Hydrochloric acid	7647-01-0
Ferric dextran	9004-66-4	Hydrocyanic acid	74-90-8
Ferric fluoride	7783-50-8	Hydrofluoric acid	7664-39-3
Ferric nitrate	10421-48-4 10028-22-5	Hydrogen chloride	7647-01-0
Ferric sulfate Ferroalloys: emission control dust or sludge	10020-22-3	Hydrogen cyanide	74–90–8
from ferrochromium production		Hydrogen fluoride	7664–39–3
Ferroalloys: emission control dust or sludge		Hydrogen peroxide (Conc. > 52%)	7722-84-1
from ferrochromiumsilicon		Hydrogen phosphide	7803–51–2
Ferrous ammonium sulfate	10045-89-3	Hydrogen selenide	7783-07-5
Ferrous chloride	775894-3	Hydrogen sulfide Hydroperoxide, 1-methyl-1-phenylethyl-	7783-06-4 80-15-9
Ferrous sulfate	7720–78–7	Hydroquinone	123-31-9
Fluenetil	4301–50–2	Hydroxylamine	7803-49-8
Fluminic acid, mercury (III) salt	2164–17–2	2–Imidazolidinethione	96-45-7
Fluometuron Fluoranthene	206-44-0	Indeno(1,2,3-cd)pyrene	193-39-5
N-2-Fluorenylacetamide	53-96-3	Ink formulation: solvent washes & sludges,	
Fluorene	86–73–7	caustic wastes & sludges or water washes &	
Fluorine	7782-41-4	sludges from cleaning tubs & equipment used	
Fluoroacetamide	640-19-7	in the formulation of ink from pigments/dri-	
Fluoroacetic acid	144-49-0	ers/soaps & stabilizers containing CR & Pb	7440 20 2
Fluoroacetic acid, sodium salt	62–74–8	Inorganic arsenic	7440–38–2
Fluoroacetyl chloride	359-06-8	Inorganic arsenicals (above 0.5% of active ingre-	
Fluorouracil	51–21–8 944–22–9	dients) Inorganic chemicals: brine purification muds	
Fonofos Formaldehyde	50-00-0	from the mercury cell process in chlorine	
Formaldehyde cyanohydrin	107–16–4	production where separately prepurified brine	
Formetanate hydrochloride	23422-53-9	is not used	
Formic acid	64–18–6	Inorganic chemicals: chlorinated hydrocarbon	
Formothion	2540-82-1	waste from the purification step of the dia-	
Formparanate	17702–57–7	phragm cell process using graphite anodes in	
Fosthietan	21548-32-3	chlorine production	
Freon 113	76–13–1	Inorganic chemicals: wastewater treatment	
Fuberidazole	3878-19-1	sludge from the mercury cell process in chlo-	
Fulminic acid, mercury(ll) salt	628-86-4	rine production Inorganic pigments: oven residue from the pro-	
Fumaric acid Furan	110–17–8 110–00–9	duction of chrome oxide green pigments	
Furan 2–Furancarbo-carboxaldehyde		Inorganic pigments: wastewater treatment	
2–Furancarbo-carboxaldenyde	98-01-1	sludge from the production of chrome green	
Furfural	98-01-1	pigments	
Furfuran	110-00-9	Inorganic pigments: wastewater treatment	
Gallium trichloride	13450-90-3	sludge from the production of chrome yellow	
Glycidylaldehyde	765–34–4	and orange pigments	

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Name	CAS Number	Name	CAS Number
Inorganic pigments: wastewater treatment		Malathion	121-75-5
sludge from the production of iron blue pig-		Maleic acid	110-16-7
ments		Maleic anhydride	108-31-6
Inorganic pigments: wastewater treatment		Maleic hydrazide	123-33-1
sludge from the production of molybdate		Malononitrile	109-77-3
orange pigments		Maneb	12427-38-2
Inorganic pigments: wastewater treatment		Manganese	7439–96–5
sludge from the production of zinc yellow		Manganese, tricarbonyl methylcyclopentadienyl	12108–13–3
pigments		Mechlorethamine	51–75–2
Iron and steel: emission control dust/sludge		Melphalan	148-82-3
from the primary production of steel in elec-		Mephosfolan	950–10–7
tric furnaces		Mercaptodimethur	2032–65–7
Iron and steel: spent pickle liquor generated by		Mercuric acetate	1600-27-7
steel finishing operations of facilities with the		Mercuric chloride	7487–94–7
iron and steel industry (SIC Codes 331 and		Mercuric cyanide	592-04-1
332)	9004–66–4	Mercuric nitrate Mercuric oxide	10045-94-0
Iron dextran	13463-40-6	Mercuric sulfate	21908–53–2 7783–35–9
Iron, pentacarbonyl- Isobenzan	297-78-9	Mercuric thiocyanate	592–85–8
Isobelizali Isobutyl alcohol	78–83–1	Mercurous nitrate	10415-75-5
Isobutyraldehyde	78-84-2	Mercury	7439–97–6
Isobutyronitrile	78-82-0	Mercury compounds	7439–97–6
Isocyanic acid, 3,4–dichlorophenyl ester	102-36-3	Mercury fulminate	628-86-4
Isocyanic acid, methylester	624-83-9	Metaldehyde	108-62-3
Isodrin	465-73-6	Metharcrolein diacetate	10476-95-6
Isofluorphate	55-91-4	Methacrylic anhydride	760-93-0
Isophorone	78-59-1	Methacrylonitrile	126-98-7
Isophorone diisocyanate	4098-71-9	Methacryloyl chloride	920-46-7
Isoprene	<i>7</i> 8–79–5	Methacryloyloxyethyl isocyanate	30674-80-7
Isopropanolamine dodecylbenzene sulfonate	42504-46-1	Methamidophos	10265-92-6
Isopropyl alcohol (mfg-strong acid process)	67–63–0	Methane, isocyanato-	624–83–9
Isopropyl chloroformate	108-23-6	Methane, oxybis (chloro)-	542-88-1
4,4'-Isopropylidenediphenol	80-05-7	Methanesulfonyl fluoride	558-25-8
Isopropylmethylpyrazolyl dimethylcarbamate	119–38–0	Methanethiol Mathanethiol	74–93–1
Isosafrole	120-58-1	Methane, trichloro-	67–66–3
3(2H)-isoxazolone, 5-(aminomethyl)- Kelthane	2763–96–4 115–32–2	Methanoic acid	64–18–6
Kepone	113–32–2 143–50–0	4,7-Methano-1 H-indene,1,4,5,6,7,8,8-hepte-chloro-3a,4,7,7a-tetrahydro-	76–44–8
Lactonitrile	78–97–7	Methanol	67–56–1
Lasiocarpine	303-34-4	Methapyrilene	91-80-5
Lead	7439-92-1	Methidathion	950–37–8
Lead acetate	301-04-2	Methiocarb	2032-65-7
Lead acetic acid	301-04-2	Methomyl	16752-77-5
Lead arsenate	10102-48-4	Methoxychlor	72-43-5
Lead, bis(acetato-O)tetrahydroxytn-	1335-32-6	2-Methoxyethanol	109-86-4
Lead chloride	7758-95-4	Methoxyethylmercuric acetate	151-38-2
Lead compounds		Methyl acrylate	96-33-3
Lead fluoborate	13814–96–5		96-33-3
Lead fluoride	7783–46–2	2–Methylaziridine	75–55–8
Lead iodide	10101-63-0	Methyl bromide	74–83–9
Lead nitrate	10099-74-8	1-Methylbutadiene	504-60-9
Lead phosphate Lead stearate	7446–27–7	Methyl 2 ablama amlata	74–87–3
Lead stearate	1072–35–1 7428–48–0	Methyl 2–chloroacrylate Methyl chlorocarbonate	80-63-7 79-22-1
	52652-59-2	Methylchloroform	79-22-1 71-55-6
	56189-09-4	3–Methylcholanthrene	56-49-5
Lead subacetate	1335-32-6	Methyl demeton	919–86–8
Lead sulfate	7446–14–2	4,4'-Methylenebis(2-chloroaniline)	101–14–4
Lead sulfide	1314-87-0	4,4'-Methylenebis(N,N-dimethyl)benzenamine	101-61-1
Lead thiocyanate	592-87-0	Methylenebis(phenylisocyanate)	101-68-8
Leptophos	21609-90-5	2,2'-Methylenebis (3,4,6-trichlorophenol)	70-30-4
Lethane 384 (conc. above 10%)	112-56-1	Methylene bromide	74–95–3
Lewisite	541-25-3	Methylene chloride	75-09-2
Lindane	58-89-9	4,4'-Methylenedianiline	101-77-9
Lithium chromate	14307–35–8	Methylene oxide	50-00-0
Lithium hydride	7580–67–8	Methyl ethyl ketone	78–93–3

Name	CAS Number	Name	CAS Number
Methyl ethyl ketone peroxide	1338-23-4	Nitrogen (II) oxide	
Methyl hydrazine	60-34-4	Nitrogen (IV) oxide	
Methyl iodide	74-88-4	Nitrogen oxide NO2	10544-72-6
Methyl isobutyl ketone	108-10-1	Nitroglycerin	55-63-0
Methyl isocyanate	624–83–9	Nitrophenol (mixed isomers)	25154–55–6
Methyl isothiocyanate	556-61-6	2-Nitrophenol	88–75–5
2-Methylactonitrile	75–84–5	m-Nitrophenol	554-84-7
Methyl mercapton Methylmercuric dicyanamide	74–93–1 502–39–6	o-Nitrophenol	88-75-5
N-Methyl-N'-nitro-N-nitrosoguanidine	70-25-7	p-Nitrophenol	100–02–7
Methyl parathion	298-00-0	Nitrophenols 2–Nitropropane	79–46–9
Methyl phenkapton	3735-23-7	Nitrosamines	79-40-9
Methyl phosphonic dichloride	676-97-1	N-Nitrosodi-n-butylamine	924-16-3
Methyl tert-butyl ether	1634-04-4	N-Nitrosodiethanolamine	1116–54–7
Methyl thiocyanate	556-64-9	N-Nitrosodiethylamine	55-18-5
Methylthiouracil	56-04-2	Nitrosodimethylamine	62-75-9
Methyltrichlorosilane	75–79–6	N-Nitrosodiphenylamine	86-30-6
Metaleorb	78–94–4 1129–41–5	p-Nitrosodiphenylamine	156–10–5
Metolcarb Mevinphos	7786-34-7	N-Nitrosodi-n-propylamine	621–64–7
Mexacarbate	315–18–4	N-Nitroso-N-ethylurea	759–73–9
Michler's ketone	90–94–8	N-Nitroso-N-methylurea	684–93–5
Mirex	2385-85-5	N-Nitroso-N-methylurethane	615-53-2
Mitomycin C	50-07-7	N-Nitrosomethylvinylamine	4549–40–0 59–89–2
Molybdenum trioxide	1313-27-5	N-Nitrosomorpholine N-Nitrosonornicotine	16543-55-8
Monocrotophos	6923-22-4	N-Nitrosopiperidine	100-75-4
Monoethylamine	75–04–7	N-Nitroso-N-propylamine	100 75 4
Monomethylamine	74–89–5	N-Nitrosopyrrolidine	930-55-2
Muscimol	2763-96-4	Nitrotoluene	1321-12-6
Mustard gas Naled	505–60–2 300–76–5	m-Nitrotoluene	99-08-1
Naphthalene	91-20-3	o-Nitrotoluene	88-72-2
Naphthalene compounds	71 20 3	p-Nitrotoluene	99–99–0
1,4-Naphthalenedione	130-15-4	5-Nitro-o-toluidine	99–55–8
Naphthenic acid	1338-24-5	Norbormide	991–42–4
1,4-Naphthoquinone	130-15-4	5-Norbornene-2, 3-dimethanol, 1,4,5,6,7,7-	
Naphthylamine	91–29–3	hexachloro, cyclic sulfite	2234-13-1
1-Naphthylamine	134–32–7	Octachloronaphthalene Octamethyl pyrophosphoramide	152-16-9
2–Naphtylamine	91–59–8	Organic chemicals: heavy ends from the frac-	132-10-9
alpha-Naphthylthiourea	86-88-4 7440-02-0	tionation column in ethyl chloride production	
Nickel Nickel ammonium sulfate	15699-18-0	Organic chemicals: aqueous spent animony cat-	
Nickel carbonyl	13463-39-3	alyst waste from fluoromethanes production	
Nickel chloride	7718-54-9	Organic chemicals: bottom stream from the	
Nickel compounds		acetonitrile column in the production of acryl-	
Nickel cyanide	557-19-7	onitrile	
Nickel hydroxide	12054-48-7	Organic chemicals: bottom stream from the	
Nickel nitrate	14216–75–2	wastewater stripper in the production of acryl-	
Nickel sulfate	7786–81–4	onitrile	
Nickel tetracarbonyl	13463-39-3	Organic chemicals: bottoms from the acetoni-	
Nicotine	54–11–5	trile purification column in the production of acrylonitrile	
Nicotine salts Nicotine sulfate	65–30–5	Organic chemicals: centrifuge and distillation	
Nitric acid	7697-37-2	residues from toluene diisocyanate production	
Nitric acid, thallium(1 +) salt	10102-45-1	Organic chemicals: column bottoms from prod-	
Nitric oxide	10102-43-9	uct separation from the production of 1,1-di-	
Nitrilotriacetic acid	139-13-9	methyl-hydrazine (UDHM) from carboxylic	
p-Nitroaniline	100-01-6	acid hydra-zines	
5–Nitro–o–anisidine	99–59–2	Organic chemicals: column bottoms or heavy	
Nitrobenzene	98-95-3	ends from the combined production of tri-	
4-Nitrobiphenyl	92–93–3	chloroethylene and perchloroethylene	
Nitrocyclohexane	1122–60–7 1836–75–5	Organic chemicals: combined wastewater streams generated from nitrobenzene/aniline	
Nitrogen diovide	10102-44-0	production	
Nitrogen dioxide Nitrogen mustard	51-75-2	Organic chemicals: condensed column over-	
Nitrogen oxide	10102-43-9	heads from intermediate separation from the	

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Name	CAS Number	Name	CAS Number
production of 1,1-dimethylhydrazine		Organic chemicals: product washwaters from	
(UDMH) from carboxylic acid hydrazides		the production of dinitrotoluene via nitration	
Organic chemicals: condensed column over-		of toluene Organic chemicals: reaction by-product water	
heads from product separation and condensed reactor vent gases from the production of		from the drying column in the production of	
1,1-dimethylhydrazine (UDHM) from carbox-		toluenediamine via hydrogenation of dinitro-	
ylic acid hydrazines		toluene	
Organic chemicals: condensed liquid light ends		Organic chemicals: separated aqueous stream	
from the purification of toluenediamine in the		from the reactor product washing step in the	
production of toluenediamine via hydrogena-		production of chlorobenzenes	
tion of dinitro-toluene		Organic chemicals: spent adsorbent solids from	
Organic chemicals: distillation bottom tars from		purification of ethylene dibromide in the pro-	
the production of phenol/acetone from cu-		duction of ethylene dibromide via bromina- tion of ethene	
mene		Organic chemicals: spent catalyst from the hy-	
Organic chemicals: distillation bottoms from		drochlorinator reactor in the production	
aniline production Organic chemicals: distillation bottoms from		1,1,1-trichloroethane	
the production of 1,1,1-trichlorethane		Organic chemicals: spent filter cartridges from	
Organic chemicals: distillation bottoms from		product purification from the production of	
the production of acetaldehyde from ethylene		1,1-dimethylhydrazine (UDMH) from carbox-	
Organic chemicals: distillation bottoms from		ylic acid hydrazides	
the production of anhydride from ortho-xy-		Organic chemicals: still bottoms from the distil-	
lene		lation of benzyl chloride Organic chemicals: still bottoms from the puri-	
Organic chemicals: distillation bottoms from		fication of ethylene dibromide in the produc-	
the production of nitrobenzene by the nitra-		tion of ethylene dibromide via bromination of	
tion of benzene		ethene	
Organic chemicals: distillation bottoms from		Organic chemicals: stripping still tails from the	
the production of phthalic anhydride from naphthalene		production of methy ethyl pyridines	
Organic chemicals: distillation light ends from		Organic chemicals: vicinals from the purifica-	
the production of phthalic anhydride from		tion of toluenediamine in the production of	
naphghalne		toluenediamine via hydrogenation of dinitro- toluene	
Organic chemicals: distillation of light ends		Organic chemicals: waste from the product	
from the production of phthalic anhydride		stream stripper in the production of 1,1,1-tri-	
from ortho-xylene		chloroethane	
Organic chemicals: distillation or fractionation		Organic chemicals: wastewater from the reactor	
column bottoms from the production of chlo-		vent gas scrubber in the production of ethy-	
ro-benzenes Organic chemicals: distillation side cuts from		lene dibromide via bromination of ethene	· —
the production of acetaldehyde from ethylene		Organorhodium Complex (PMN-82-147)	12026 02 1
Organic chemicals: heavy ends from the distilla-		Osmium oxide	12036-02-1
tion of vinyl chloride in vinyl chloride mono-		Osmium oxide (T-4)- Osmium tetroxide	20816-12-0 20816-12-0
mer production		Ouabain	630-60-4
Organic chemicals: heavy ends (still bottoms)		Oxamyl	23135-22-0
from the purification column in the produc-		1,2-Oxathiolane, 2,2-dioxide	1120-71-4
tion of epichlorohydrin		2H-1,3,2-Oxazaphosphorine, 2 [bis (2-	
Organic chemicals: heavy ends from the distilla-		chlorethyl) amino] benzene-	·
tion of ethylene dichloride in ethylene dichlo-		Oxetane, 3,3-bis(chloromethyl)-	78–71–7
ride production Organic chemicals: heavy ends from the purifi-		Oxirane	75–21–8 765–34–4
cation of toluenediamine in the production of		Oxiranecarboxyaldehyde 10, 10'-Oxybisphenoxarsine	58–36–6
toluenediamine via hydrogenation of dinitro-		Oxydisulfoton	2497–07–6
toluene		Oxyfluorfen	42874-03-3
Organic chemicals: heavy ends from the heavy		Ozone	10028-15-6
ends column from the product of 1,1,1-tri-		Paraformaldehyde	30525-89-4
chloroethane		Paraldehyde	123-63-7
Organic chemicals: heavy ends or distillation		Paraquat	1910-42-5
residues from the production of carbon tetra-		Paraquat methosulfate	2074-50-2
chloride	 .	Parathion	56-38-2
Organic chemicals: organic condensate from the solvent recovery column in the production		Paris green Pentaborane	12002–03–8 19624–22–7
of toluene diisocyanate via phosgenation of		Pentachlorobenzene	608-93-5
toluenediamine		Pentachloroethane	76-01-7
Organic chemicals: process residues from ani-		Pentachloronitrobenzene	82-68-8
line extraction from the production of aniline		Pentachlorophenol	87-86-5

Name	CAS Number	Name	CAS Number
Pentadecylamine	2570-26-5	Petroleum refining: dissolved air flotation	CAD Number
1,3-Pentadiene	504-60-9	(DAF) float from the petroleum refining in-	
Peracetic acid	79–21–0	dustry	
Perchloroethylene	127–18–4	Petroleum refining: heat exchanger bundle	
Perchloromethylmercaptan	594-42-3	cleaning sludge from the petroleum refining	
Pesticides: 2,6-Dichlorophenol waste from the	051 12 0	industry	
production of 2,4–D		Petroleum refining: slop oil emulsion solids	
Pesticides: baghouse dust and floor sweepings		from the petroleum refining industry	
in milling and packaging operations from the		Petroleum refining: tank bottoms (leaded) from	
production or formulation of ethylenebisdi-		the petroleum refining industry	
thiocarbamic acid and its salts		Phenacetin	62-44-2
Pesticides: by-product salts generated in the		Phenanthrene	85-01-8
production of MSMA and cacodylic acid		Phenarsazine chloride	578-94-9
Pesticides: filter cake from the filtration of		Phenol	108-95-2
diethylphosphorodithoic acid in the produc-		Phenol, 2,4-dinitro-6-(1-methylpropyl)	88-85-7
tion of phorate		Phenol, 2,4-dinitro-6-methyl- salts	1010 55 0
Pesticides: filter solids from the filtration of		Phenol, methyl-	1319–77–3
hexachlorocyclopentadiene in the production		Phenol, 3-(1-methylethyl)-, methylcarbamate	64-00-6
of chlordane		Phenol, 2-(1-methylpropyl)-4,6-dinitro	88–85–7 4418–66–0
Pesticides: filtration, evaporation, and centrifu-		Phenol, 2,2'-thiobis[4-chloro-6-methyl- Phenyl dichloroarsine	696–28–6
gation solids from the production of ethylene-		p-Phenylenediamine	106-50-3
bisdithiocarbamic acid and its salts		1,10–(1,2–Phenylene)pyrene	193–39–5
Pesticides: heavy ends or distillation residues		Phenylhydrazine hydrochloride	59-88-1
from the distillation of tetrachlorobenzene in		Phenylmercuric acetate	62–38–4
the production of 2,4,5–T		2–Phenylphenol	90-43-7
Pesticides: process wastewater (including super-		Phenylsilatrane	2097-19-0
mates, filtrates, and washwaters) from the		Phenylthiourea	103-85-5
production of ethylenebisdithiocarbamic acid		Phorate	298-02-2
and its salt		Phosacetim	4104-14-7
Pesticides: reactor vent scrubber water from the		Phosalone (conc. above 13%)	2310-17-0
production of ethylenebisdithiocarbamic acid		Phosfolan	947-02-4
and its salts	_	Phosgene	75–44–5
Pesticides: spent absorbent and wastewater sep-		Phosmet	732–11–6
arator solids from the production of methyl bromide		Phosphamidon	13171–21–6
Pesticides: still bottoms from toluene reclama-		Phosphine	7803–51–2
tion distillation in the production of disulfo-		Phosphonothioic acid, methyl-, S-(2-(bis(1-	50500 (0.0
ton	_	methylethyl)amino	50782–69–9
Pesticides: untreated process wastewater from	_	Phosphonothioic acid, methyl-, O-ethyl	2702 12 1
the production of toxaphene		O-(4-methylthio)phen Phosphonothioic acid, methyl-, O-(4-nitro-	2703–13–1
Pesticides: untreated wastewater from the pro-		phenyl) O-phenyl es	2665-30-7
duction of 2,4–D		Phosphoric acid	7664–38–2
Pesticides: vacuum stripper discharge from the		Phosphoric acid, dimethyl 4–(methylthio) phenyl	7004-30-2
chlordane chlorinator in the production of		ester	3254-63-5
chlordane		Phosphoric acid, lead salt	7446–27–7
Pesticides: wastewater and scrub water from the		Phosphorothioic acid, O,O-dimethyl-O-[p-	,,,,,
chlorination of cyclopentadiene in the produc-		((dimethyl-amino)-sulfonyl)phenyl] ester	52-85-7
tion of chlordane	 :	Phosphorothioic acid, O,O-dimethyl-5-(2-	
Pesticides: wastewater from the reactor and		(methylthio)ethyl)es	2587-90-8
spent sulfuric acid from the acid dryer from		Phosphorus	7723-14-0
the production of methyl bromide	_	Phosphorus oxychloride	10025-87-3
Pesticides: wastewater from the washing and		Phosphorus pentachloride	10026-13-8
stripping of phorate production		Phosphorus pentasulfide	1314-80-3
Pesticides: wastewater treatment sludge from		Phosphorus pentoxide	1314–56–3
the production of chlordane	. —	Phosphorus sulfide	1314-80-3
Pesticides: wastewater treatment sludge from		Phosphorus trichloride	7719–12–2
the production of phorate		Phthalate esters	05 44 0
Pesticides: wastewater treatment sludge from		Phthalic anhydride	85–44–9
the production of toxaphene		Physostigmine	57–47–6
Pesticides: wastewater treatment sludges from		Physostigmine, salicylate (1:1)	57-64-7
the production of disulfoton	-	2–Picoline Picric acid	109-06-8 88-89-1
Pesticides: wastewater treatment sludges gener-		Picric acid Picrotoxin	124–87–8
ated in the production of creosote Petroleum refining: API separator sludge from		Pindone (conc. above 12%)	83-26-1
the petroleum refining industry		Piperidine	110-89-4
mo ponoroum romming manning			223 07 4

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Name	CAS Number	Name	CAS Number
Pirimicarb (conc. above 15%)	23103-98-2	Pyrene Pyrenthyins	129-00-0
Pirimifos-ethyl Polychlorinated biphenyls (PCBs)	23505-41-1	Pyrenthrins	121–21–1 121–29–9
1 diyemormated diphenyis (1 ebs)	1336-36-3		8003-34-7
	11096-82-5	4-Pyridinamine	504-24-5
	11097-69-1	Pyridine	110-86-1
	11104-28-2	Pyridine, 2-[(2-dimethylamino)-2-thenylami-	
	11141–16–5 12672–29–6	no]- Projeting (S) 2 (1 mothyl 2 myggalidigyl)	54–11–5
	12672-29-6	Pyridine, (S)–3–(1–methyl–2–pyrrolidinyl) Pyridine, 2–methyl–5–vinyl–	140–76–1
	53469-21-9	Pyridine, 4-nitro,-1-oxide	1124-33-0
Polychlorinated terphenyls		Pyriminil	53558-25-1
Polynuclear aromatic hydrocarbons		Pyrophosphoric acid, tetraethyl ester	
Potassium arsenate	7784-41-0	Pyrrole, tetrahydro-N-nitroso-	107–49–3 930–55–2
Potassium arsenite Potassium bichromate	10124-50-2 7778-50-9	Pyrrolidine, 1-nitroso Quaternary ammonium compounds	930-33-2
Potassium chromate	7789-00-6	Ouinoline	91-22-5
Potassium cyanide	151-50-8	Quinone	106-51-4
Potassium hydroxide	1310–58–3	Quintozene	82–68–8
Potassium permanganate	7722–64–7	Radionuclides	507 (0.0
Potassium silver cyanide Primary aluminum: spent potliners from pri-	506-61-6	Red squill (conc. above 30%) Reserpine	507–60–8 50–55–5
mary aluminum reduction		Resorcinol	108-46-3
Primary copper: acid plant blowdown slur-		Saccharin and salts	81-07-2
ry/sludge resulting from the thickening of		Safrole	94–59–7
blowdown slurry from primary copper produc-		Salcomine	14167–18–1
tion Primary lead: surface impoundment solids con-		Sarin Secondary lead: emission control dust/sludge	107–44–8
tained in and dredged from surface impound-		from secondary lead smelting	
ments at primary lead smelting facilities		Secondary lead: waste leaching solution from	
Primary zinc: sludge from treatment of process		acid leaching of emission control dust/sludge	
wastewater and/or acid plant blowdown from		from secondary lead smelting	
primary zinc production Promecarb	2631–37–0	Selenious acid	7783–00–8 12039–52–0
Pronamide	23950-58-5	Selenious acid, dithallium(1+) salt Selenium	7782-49-2
1-Propanamine	107-10-8	Selenium compounds	
Propanedinitrile	109-77-3	Selenium dioxide	7446-08-4
Propanenitrile	107-12-0	Selenium disulfide	7488–56–4
Propage 2.2' owibig 2 chloro	542–76–7 108–60–1	Selenium oxide Selenium oxychloride	7446–08–4 7791–23–3
Propane, 2,2'-oxybis(2-chloro- 1,3-Propane sultone	1120-71-4	Selenium oxychioride Selenium sulfide	7488–56–4
1,Propanol,2,3-dibromo-, phosphate (3:1)	126-72-7	Selenourea	630–10–4
2-Propanone	67-64-1	Semicarbazide hydrochloride	563-41-7
Propargite	2312-35-8	Silane, (4-aminobutyl)diethoxymethyl-	3037–72–7
Propargyl alcohol	107–19–7	Silver	7440–22–4
Propargyl bromide 2-Propenenitrile	106–96–7 107–13–1	Silver compounds Silver cyanide	506-64-9
2–Propenentifile, 2–methyl–	126–98–7	Silver nitrate	7761–88–8
2–Propenoic acid, ethyl ester	140-88-5	Silvex	93-72-1
2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	Sodium	7440-23-5
2-Propen-1-ol	107–18–6	Sodium arsenate	7631–89–2
beta–Propiolactone Propionaldehyde	57–57–8 123–38–6	Sodium arsenite Sodium azide	7784–46–5 26628–22–8
Propionic acid	79-09-4	Sodium bichromate	10588-01-9
Propionic anhydride	123-62-6	Sodium bifluoride	1333-83-1
Propoxur	114-26-1	Sodium bisulfite	7631-90-5
n-Propylamine	107–10–8	Sodium cacodylate	124-65-2
Propylene (Propens)	109–61–5 115–07–1	Sodium chlorate (conc. above 7%) Sodium chromate	7775–09–9
Propylene (Propene) Propylene dichloride	78–87–5	Sodium chromate Sodium cyanide	7775–11–3 143–33–9
Propylene diemoride Propyleneimine	75–55–8	Sodium dodecylbenzenesulfonate	25155-30-0
Propylene oxide	75-56-9	Sodium flouride	7681–49–4
1,2-Propylenimine	75–55–8	Sodium fluoroacetate	62–74–8
Prothoate 2,4–(1H,3H)–Pyrimidinedione, 5–[bis(2–chloro-	2275–18–5	Sodium hydroxide	16721-80-5
ethyl)amino]–	66-75-1	Sodium hydroxide Sodium hypochlorite	1310–73–2 7681–52–9
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Name	CAS Number	Name	CAS Number
Sodium methylate	124-41-4	Thallic oxide	1314-32-5
Sodium monofluoroacetate	62-74-8	Thallium(I) acetate	563-68-8
Sodium nitrite	7632-00-0	Thallium(I) acetic acid, salt	563-68-8
Sodium phosphate, dibasic	7558-79-4	Thallium(I) carbonate	6533-73-9
Sodium phosphate, tribasic	7601-54-9	Thallium chloride	7791–12–0
Sodium selenate	13410-01-0	Thallium	7440–28–0
Sodium selenite	10102–18–8	Thallium compounds	
Sodium sulfide	1313-82-8	Thallium(I) nitrate	10102-45-1
Sodium tellurite	10102-20-2	Thallium oxide	1314–32–5
Stannane, acetoxytriphenyl-	900–95–8	Thallium(I) selenide	12039-52-0
Stannous flouride	7783-47-3	Thallium selenite	12039–52–0
4,4'-Stilbenediol, alpha, alpha'-diethyl-	56–33–1	Thallium sulfate	7446–18–6 10031–59–1
Streptozotocin Strobane	18883-66-4 8001-50-1	Thallous carbonate	6533-73-9
Strontium sulfide	1314-96-1	Thallous chloride	7791–12–0
Strontium chromate	7789-06-2	Thallous malonate	2757–18–8
Strychnidin-10-one-and salt	57-24-9	Thallous sulfate	7446–18–6
Strychnine	57-24-9	Thioacetamide	62–55–5
Strychnine salts	-	Thiocarbazide	2231-57-4
Strychnine, sulfate	60-41-3	4,4'-Thiodianiline	139-65-1
Styrene	100-42-5	Thiodiphosphoric acid, tetraethyl ester	3689-24-5
Styrene oxide	96-09-3	Thiofanox	39196-18-4
Sulfotep	3689-24-5	Thioimidodicarbonic diamide	541-53-7
Sulfoxide, 3-chloropropyl octyl	3569-57-1	Thiomethanol	74-93-1
Sulfur dioxide	7446-09-5	Thionazin	297-97-2
Sulfuric acid	7664–93–9	Thiophenol	108-98-5
Sulfuric acid, dithallium(1+) salt	7446–18–6	Thiosemicarbazide	79–19–6
	10031-59-1	Thiourea	62–56–6
Sulfuric acid, thallium(I) salt	7446–18–6	Thiourea, (2-methylphenyl)-	614–78–8
Sulfur monochloride	12771-08-3	Thiram	137–26–8
Sulfur phosphide	1314-80-3	Thorium dioxide	1314-20-1
Sulfur selenide	7446–34–6	Titanium tetrachloride	7550-45-0
Sulfur tetrafluoride Sulfur trioxide	7783–60–0 7446–11–9	TOK (2,4 dichlorophenyl-p-nitrophenyl) Toluene	1836–75–5 108–88–3
2,4,5–T amines	1319–72–8	Toluenediamine	95-80-7
2,4,3–1 annies	2008-46-0	Totachediamine	496–72–0
	3813-14-7		823-40-5
	6369–96–6		25376-45-8
·	6369–97–7	Toluene-2,4-diisocyanate	584-84-9
2,4,5-T esters	1928-47-8	Toluene-2,6-diisocyanate	91-08-7
-, ,-	2545-59-7	o-Toluidine hydrochloride	636-21-5
	25168-15-4	o-Toluidine	95-53-4
	61792-07-2	p-Toluidine	106-49-0
2,4,5–T salts	13560-99-1	Toxaphene	8001-35-2
Tabun	77–81–6	2,4,5–TP esters	32534-95-5
2.3.6-TBA and related polychlorbenzoic acids,		2,4,5–TP	440
dimethylamine salts	50–31–7	Trans-1,4-dichlorobutene	110-57-6
Tellurium	13494–80–9	Triamiphos	1031–47–6
Tellurium hexafluoride	7783-80-4	Triaziquone	68–76–8
Terbufos	13071–79–9	Triazofos	24017–47–8 75–25–2
Terephthalic acid	100-21-0 95-94-3	Tributultin	56-35-9
1,2,4,5–Tetrachlorobenzene 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD)	1746-01-6	Tributyltin Trichlorfon	52-68-6
1,1,2,2-Tetrachloroethane	79–34–5	Trichloroacetaldehyde	75–87–6
1,1,2-Tetrachloroethane	630–20–6	Trichloroacetyl chloride	76-02-8
Tetrachloroethylene	127–18–4	1,2,4-Trichlorobenzene	120-82-1
2,3,4,6–Tetrachlorophenol	58-90-2	Trichloro(chloromethyl)silane	1558-25-4
Tetrachlorvinphos	961–11–5	Trichloro(dichlorophenyl)silane	27137-85-5
Tetraethyldithiopyrophosphate	3689-24-5	1,1,1-Trichloroethane	71-55-6
Tetraethyllead	78-00-2	1,1,2-Trichloroethane	79-00-5
Tetraethylpyrophosphate	107-49-3	Trichloroethene	79–01–6
Tetraethyltin	597-64-8	Trichloroethylene	79-01-6
Tetrahydrofuran	109–99–9	Trichloroethylsilane	115-21-9
Tetramethyllead	75–74–1	Trichloromethanesulfenyl chloride	594–42–3
Tetranitromethane	509–14–8	Trichloromethanethiol	75–70–7
Tetraphosphoric acid, hexaethyl ester	757–58–4	Trichloromonofluoromethane	75–69–4

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Name	CAS Number	Name	CAS Number
Trichloronate	327-98-0	Xylene	1330-20-7
Trichlorophenol	25167-82-2	Xylene (mixed isomers)	1330–20–7
2,3,4-Trichlorophenol	15950–66–0	m-Xylene	108–38–3
2,3,5-Trichlorophenol	933–78–8	o-Xylene	95–47–6
2,3,6-Trichlorophenol	933–75–5	p-Xylene	106-42-3
2,4,5-Trichlorophenol	95-95-4	Xylenes	1330-20-7
- · · · · · · · · · · · · · · · · · · ·	88-06-2	Xylenol	1300-71-6
2,4,6-Trichlorophenol	88-06-2	2,6–Xylidine	87–62–7
3,4,5-Trichlorophenol	609–19–8	Xylylene dichloride	28347-13-9
(2,4,5-Trichlorophenoxy)acetic acid	93-76-5	Zinc (fume and dust)	7440–66–6
(2,4,5-Trichlorophenoxy)acetic acid esters	93-79-8	Zinc acetate	557–34–6
Trichlorophenylsilane	98-13-5	Zinc ammonium chloride	14639–97–5
1,2,3-Trichloropropane	96-18-4		14639-98-6
Triethanolamine dodecylbenzene sulfonate	27323-41-7		52628-25-8
Triethoxysilane	998-30-1	Zinc and compounds	1000 07 (
Triethylamine	121-44-8	Zinc borate	1332-07-6
Trifluralin	1582-09-8	Zinc bromide	7699–45–8
Trimethylamine	75-50-3	Zinc carbonate	3486–35–9
1,2,4–Trimethylbenzene	95-63-6	Zinc chloride	7646–85–7
Trimethylchlorosilane	75-77-4	Zinc cyanide	557–21–1
Trimethylolpropane phosphite	824-11-3	Zinc, dichloro(4,4-dimethyl-5((((methylami-	50 0 50 00 0
Trimethyltin chloride	1066-45-1	no)carbonyl)oxy)im	58270-08-9
sym-Trinitrobenzene	99-35-4	Zinc fluoride	7783–49–5
1,3,5-Trioxane,2,4,6-Trimethyl-	123-63-7	Zinc formate	557-41-5
Triphenyltin chloride	639-58-7	Zinc hydrosulfite	7779–86–4
Triphenyltin hydroxide (conc. above 10%)	76–87–9	Zinc nitrate	7779–88–6
Tris(2-chloroethyl)amine	555-77-1	Zinc phenolsulfonate	127-82-2
Tris(2,3-dibromopropyl) phosphate	126-72-7	Zinc phosphide	1314–84–7
Trypan blue	72-57-1	Zinc phosphide, when present at concentration	1014 04 5
Uracil mustard	66-75-1	greater than 10 percent	1314-84-7
Uranium peroxide	19525-15-6	Zinc silicofluoride	16871–71–9
Uranyl acetate	541-09-3	Zinc sulfate	7733-02-0
Uranyl nitrate	36478-76-9	Zineb	12122-67-7
Uranyl sulfate	1314-64-3	Zirconium nitrate	13746-89-9
Urea, N-ethyl-N-nitroso-	759–73–9	Zirconium potassium fluoride	16923-95-8
Urea, N-methyl-N-nitroso-	684–93–5	Zirconium sulfate	14644-61-2
Urethane	51-79-6	Zirconium tetrachloride	10026–11–6
Valinomycin	2001-95-8		
Vanadic acid, ammonium salt	7803–55–6	NEW JERSEY DEPARTMENT OF ENVIR	CONMENTAL
Vanadium (fume or dust)	7440-62-2	PROTECTION	
Vanadium oxide	1314-62-1	LIST OF HAZARDOUS SUBSTAN	ICEC
Vanadium pentoxide	1314-62-1		
Vanadyl sulfate	27774-13-6	(LISTED BY CAS NUMBER)	
Veterinary pharmaceuticals: distillation tar resi-		CAS Number Name	
dues from the distillation of aniline-based			41
compounds in the production of veterinary		Bottom sludge generated from	
pharmaceuticals from arsenic or organo ar-		blending, and treatment of wa	ste on in waste
senic compounds		oil processing facilities	la
Veterinary pharmaceuticals: residue from the		— Condensed light ends, spent fil	
use of activated carbon for decolorization in		aids, and spent desiccant wa	
the production of veterinary pharmaceuticals		production of certain chlorinat	
from arsenic or organo-arsenic compounds		drocarbons, by free radical cat	
Veterinary pharmaceuticals: wastewater treat-		es. These chlorinated aliphati are those having carbon chain	
ment sludges generated during the production		from one to and including fiv	
of veterinary pharmaceuticals from arsenic or		amounts and positions of ch	
organo-arsenic compounds		tion.	iornic substitu-
Vinyl acetate	108-05-4	—— Cyanidation wastewater tailing	nond sediment
Vinyl acetate monomer	108-05-4	from mineral metals recovery of	
Vinyl chloride	75-01-4	Discarded unused formulations	
Vinylidene chloride	75–35–4	tetra-, or pentachlorophenol o	r discarded un-
Warfarin	81–81–2	used formulation containing	
Warfarin sodium	129-06-6	rived from these chlorophenol	
Wood preservation: bottom sediment sludge		does not include formulation	
from the treatment of wastewaters from wood		Hexachlorophene synthesized	
preserving processes that use creosole and/or		fied 2,4,5-trichlorophenol as the	
pentachlorophenol		nent.).	
		/ -	

CAS Number	Name	CAS Number	Name
	Leachate resulting from the treatment, storage,		vent mixtures/blends containing, before use, a
	or disposal of wastes classified by more than		total of 10 percent or more (by volume) of
	one waste code under Subpart D, or from a		one or more of the above halogenated sol-
	mixture of wastes classified under Subparts C		vents or those listed in F001, F004, or F005;
	and D of this part. (Leachate resulting from		and still bottoms from the recovery of these
	the management of one or more of the fol-		spent solvents and spent solvent mixtures.
	lowing EPA Hazardous Wastes and no other		The following spent non-halogenated solvents:
	hazardous wastes retains its hazardous waste		cresols and cresylic acid, and nitrobenzene;
	code(s): F020, F021, F022, F023, F026, F027		all spent solvent mixtures/blends containing,
,	and/or F028.		before use, a total of 10 percent or more (by
	Oil spill cleanup residue which: A. is contami-		volume) of one or more of the above non-
	nated beyond saturation; or B. the generator		halogenated solvents or those solvents listed
	fails to demonstrate that the spill material was		in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and
	not one of the listed hazardous waste oils.		spent solvent mixtures.
	Plating sludges from the bottom of plating baths from electroplating operations where cyanides		The following spent non-halogenated solvents:
	are used in the process.		toluene, methyl ethyl ketone, carbon disulfide,
	Process wastes, including but not limited to,		isobutanol, pyridine, benzene, 2-ethoxyetha-
	distillation, heavy ends, tars, and reactor		nol, and 2-nitropropane; all spent solvent
	clean-out wastes, from the production of cer-		mixtures/blends containing, before use, a total
	tain chlorinated aliphatic hydrocarbons by		of 10 percent or more (by volume) of one or
	free radical catalized processes. These chlo-		more of the above non-halogenated solvents
	rinated aliphatic hydrocarbons are those hav-		or those solvents listed in F001, F002, or
	ing carbon chain lengths ranging from one to		F004; and still bottoms from the recovery of
	and including five, with varying amounts and		these spent solvents and spent solvent mix-
	positions of chlorine substitution. (This list-		tures.
	ing does not include wastewaters, wastewater		The following spent non-halogenated solvents:
	treatment sludges, spent catalysts, and wastes		xylene, acetone, ethyl acetate, ethyl benzene,
	listed in 261.31 or 261.32).		ethyl ether, methyl isobutyl ketone, n-butyl
	Quenching bath residues from oil baths from		alcohol, cyclohexanone, and methanol; all
	metal heat treating operations where cyanides		spent solvent mixtures/blends containing, be-
	are used in the process. Quenching wastewater treatment sludges from		fore use, only the above spent non-halogenat- ed solvents; and all spent solvent mix-
	metal heat treating operations where cyanides		tures/blends containing, before use, one or
	are used in the process.		more of the above non-halogenated solvents,
	Residues resulting from the incineration or ther-		and, a total of 10 percent or more (by vol-
	mal treatment of soil contaminated with EPA	•	ume) of one or more of those solvents listed
	Hazardous Waste Nos. F020, F021, F022,		in F001, F002, F004, and F005; and still
	F023, F026, and F027.		bottoms from the recovery of these spent
	Spent cyanide bath solutions from mineral met-		solvents and spent solvent mixtures.
	als recovery operations.		The following used and unused waste oils: met-
	Spent cyanide plating bath solutions from elec-		al working oils; turbine lubricating oils; die-
	troplating operations.		sel lubricating oils; and quenching oils
	Spent cyanide solutions from salt bath pot		Waste automotive crankcase and lubricating oils
	cleaning from metal heat treating operations.		from automotive service and gasoline stations,
	Spent stripping and cleaning bath solutions from		truck terminals, and garages Waste oil and bottom sludge generated by gaso-
	electroplating operations where cyanides are		line stations when gasoline and oil tanks are
	used in the process. The following spent halogenated solvents used		tested, cleaned, or replaced
	in degreasing: tetrachloroethylene, trichloroe-		Waste oil and bottom sludge generated from
	thylene, methylene chloride. 1,1,1-trichloro-	*	tank cleanouts from residential/commercial
	ethane, carbon tetrachloride, and chlorinated		fuel oil tanks
	fluorocarbons; all spent solvent mix-		Waste petroleum oil generated when tank trucks
	tures/blends used in degreasing containing,		or other vehicles or mobile vessels are
	before use, a total of 10 percent or more (by		cleaned, including, but not limited to, oily
	volume) of one or more of the above halo-		ballast water from product transport units of
	genated solvents or those solvents listed in		boats, barges, ships, or other vessels
	F002, F004 and F005; and still bottoms from		Wastes (except wastewater and spent carbon
	the recovery of these spent solvents and spent		from hydrogen chloride purification) from the
	solvent mixtures.		manufacturing use (as a reactant, chemical
	The following spent halogenated solvents; tetra-		intermediate, or component in a formulating
	chloro ethylene, methylene chloride, trichlo-		process) of pentachlorophenol, or of interme-
	roethylene, 1,1,1-trichloroethane, chloroben-		diates used to produce its derivatives.
	zene, 1,1,2-trichloro-1,2,2-trifluoroethane,		Wastes (except wastewater and spent carbon
	orthodichlorobenzene, trichlorofluorometh-		from hydrogen chloride purification) from the
	ane, and 1,1,2-trichloroethane; all spent sol-		production of materials on equipment previ-

		GAG N	Nome
CAS Number	Name ously used for the production or manufactur-	CAS Number	Name 2,4–Dichlorophenoxyacetic acid, salts and esters
	ing use (as a reactant, chemical intermediate,		4,6-Dinitro-o-cresol and salts
	or component in a formulating process) of tri-		Dithiopyrophosphoric acid, tetraethyl ester
	and tetrachlorophenols. (This listing does		EBDCs
	not include wastes from equipment used only		Endosulfan metabolites
	for the production or use of Hexachlorophene		Endrin metabolites
	from highly purified 2,4,5-trichlorophenol.).		1,2–Ethanediylbiscarbamodithioic acid
	Wastes (except wastewater and spent carbon		Ethenamine, N-methyl-N-nitroso-
	from hydrogen chloride purification) from the		Ethene, trans-1,1-dichloro- Ethylenebis(dithiocarbamic acid)
	production or manufacturing use (as a reac- tant, chemical intermediate, or component in		Explosives: pink/red water from TNT opera-
	a formulating process) of tri- or tetrachloro-		tions
	phenol, or of intermediates used to produce		Explosives: spent carbon from the treatment of
	their pesticide derivatives. (This listing does		wastewater containing explosives
	not include wastes from the production of		Explosives: wastewater treatment sludges from
	Hexachlorophene from highly purified		the manufacturing and processing of explo-
	2,4,5-trichlorophenol.		sives
	Wastewater treatment sludges from electro-	***************************************	Explosives: wastewater treatment sludges from the manufacturing formulation and loading of
	plating operations except from the following processes: (1) sulfuric acid anodizing of alu-		lead-based initiating compounds
	minum; (2) tin plating on carbon steel; (3)		Ferroalloys: emission control dust or sludge
	zinc plating (segregated basis) on carbon		from ferrochromium production
	steel; (4) aluminum or zinc-aluminum plating		Ferroalloys: emission control dust or sludge
	on carbon steel; (5) cleaning/stripping associ-		from ferrochromiumsilicon
	ated with tin, zinc and aluminum plating car-		Fluminic acid, mercury (III) salt
	bon steel, and (6) chemical etching and mill-		2–Furancarbo–carboxaldehyde
	ing of aluminum.		Haloethers
	Wastewater treatment sludges from the chemi- cal conversion coating of aluminum except		Halomethanes Heptachlor metabolites
· .	from zirconium phosphating in aluminum can		Hexachlorohexahydro-exo,exo-dimethanona-
	washing when such phosphating is an exclu-		phthalene
	sive conversion coating process.		Ink formulation: solvent washes & sludges,
	3-(alpha-acetonyl benzyl)-4-hydroxy-coumarin		caustic wastes & sludges or water washes &
	and salts		sludges from cleaning tubs & equipment used
	Antimony compounds		in the formulation of ink from pigments/dri-
	Arsenic compounds		ers/soaps & stabilizers containing Cr & Pb
•	Benzene, 1–methyl–1,2,4–dinitro– Benzene, 1,2–methylenedioxy–4–propyl		Inorganic arsenicals (above 0.5% active ingredients)
	1,2-Benzisothiazolin-3-one,1,1-dioxide, and		Inorganic chemicals: brine purification muds
	salts		from the mercury cell process in chlorine
	Butanoic acid, 4–[bis(2–chloroethyl)		production where separately prepurified brine
 .	Cadmium compounds		is not used.
	Carbamimidoselenoic acid		Inorganic chemicals: chlorinated hydrocarbon
	Chlordane, technical		waste from the purification step of the dia-
	Chlorinated benzenes		phragm cell process using graphite anodes in
	Chlorinated ethanes Chlorinated naphthalene		chlorine production Inorganic chemicals: wastewater treatment
	Chlorinated phenols		sludge from the mercury cell process in chlo-
	Chloroalkyl Ethers		rine production
	4-Chloro-m-cresol epoxy-		Inorganic pigments: oven residue from the pro-
	Chromium compounds		duction of chrome oxide green pigments
	Coke Oven Emissions		Inorganic pigments: wastewater treatment
	Coking: ammonia still lime sludge from coking		sludge from the production of chrome green
	operations Colving decenter took for sludge from colving		pigments
	Coking: decanter tank far sludge from coking operations		Inorganic pigments: wastewater treatment sludge from the production of chrome yellow
***	Copper compounds		and orange pigments
	Cresol		Inorganic pigments: wastewater treatment
	Cresols		sludge from the production of iron blue pig-
	Cyanide compounds		ments
	Cyanides (soluble salts and complexes), not		Inorganic pigments: wastewater treatment
	otherwise specified		sludge from the production of molybdate
	1,4-Cyclohexadienedione		orange pigments
	2,4–D, salts and esters DDT metabolites		Inorganic pigments: wastewater treatment sludge from the production of zinc yellow
	m-Dichlorobenzene		pigments

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CAS Number	Name Iron and steel: emission control dust/sludge from the primary production of steel in elec-	CAS Number	Organic chemicals: distillation bottoms from the production of anhydride from ortho-xy-
	tric furnaces Iron and steel: spent pickle liquor generated by		lene Organic chemicals: distillation bottoms from
	steel finishing operations of facilities with the iron and steel industry (SIC Codes 331 and		the production of nitrobenzene by the nitra- tion of benzene
	332)		Organic chemicals: distillation bottoms from
	Lead compounds Mothylahlaroform		the production of phthalic anhydride from
	Methylchloroform		naphthalene Organic chemicals: distillation light ends from
	Naphthalene compounds Nickel compounds		the production of phthalic anhydride from
	Nicotine salts		naphghalene
	Nitrogen (II) oxide		Organic chemicals: distillation of light ends
	Nitrogen (IV) oxide		from the production of phthalic anhydride
	Nitrophenols		from ortho-xylene
	Nitrosamines		Organic chemicals: distillation or fractionation
	N-Nitroso-N-propylamine		column bottoms from the production of chlo-
	5-Norbornene-2, 3-dimethanol, 1,4,5,6,7,7-		robenzenes
	hexachloro, cyclic sulfite		Organic chemicals: distillation side cuts from
	Organic chemicals: heavy ends from the frac-		the production of acetaldehyde from ethylene
	tionation column in ethyl chloride production		Organic chemicals: heavy ends from the distilla-
	Organic chemicals: aqueous spent animony cat-		tion of vinyl chloride in vinyl chloride mono-
	alyst waste from fluoromethanes production		mer production
	Organic chemicals: bottom stream from the		Organic chemicals: heavy ends (still bottoms)
	acetonitrile column in the production of acryl-		from the purification column in the produc-
	onitrile		tion of epichlorohydrin
	Organic chemicals: bottom stream from the	•	Organic chemicals: heavy ends from the distilla-
	wastewater stripper in the production of acryl-		tion of ethylene dichloride in ethylene dichlo-
	onitrile		ride production
	Organic chemicals: bottoms from the acetoni-		Organic chemicals: heavy ends from the purifi-
	trile purification column in the production of		cation of toluenediamine in the production of
	acrylonitrile	•	toluenediamine via hydrogenation of dinitro-
	Organic chemicals: centrifuge and distillation		toluene
	residues from toluene diisocyanate production		Organic chemicals: heavy ends from the heavy
	Organic chemicals: column bottoms from prod-		ends column from the product of 1,1,1–tri-
	uct separation from the production of 1,1-di-		chloroethane
	methylhydrazine (UDHM) from carboxylic		Organic chemicals: heavy ends or distillation
	acid hydrazines		residues from the production of carbon tetra-
	Organic chemicals: column bottoms or heavy		chloride
	ends from the combined production of tri-		Organic chemicals: organic condensate from
	chloroethylene and perchloroethylene		the solvent recovery column in the production
	Organic chemicals: combined wastewater		of toluene diisocyanate via phosgenation of toluenediamine
	streams generated from nitrobenzene/aniline production		Organic chemicals: process residues from ani-
	Organic chemicals: condensed column over-		line extraction from the production of aniline
	heads from intermediate separation from the		Organic chemicals: product washwaters from
	production of 1,1–dimethylhydrazine		the production of dinitrotoluene via nitration
	(UDMH) from carboxylic acid hydrazides		of toluene
	Organic chemicals: condensed column over-		Organic chemicals: reaction by-product water
	heads from product separation and condensed		from the drying column in the production of
	reactor vent gases from the production of		toluenediamine via hydrogenation of dinitro-
	1,1-dimethylhydrazine (UDHM) from carbox-		toluene
	ylic acid hydrazines		Organic chemicals: separated gagueous stream
	Organic chemicals: condensed liquid light ends		from the reactor product washing step in the
	from the purification of toluenediamine in the		production of chlorobenzenes
	production of toluenediamine via hydrogena-		Organic chemicals: spent adorbent solids from
	tion of dinitrotoluene		purification of ethylene dibromide in the pro-
	Organic chemicals: distillation bottom tars from		duction of ethylene dibromide via bromina-
	the production of phenol/acetone from cu-		tion of ethene
	mene		Organic chemicals: spent catalyst from the hy-
	Organic chemicals: distillation bottoms from		drochlorinator reactor in the production of
	aniline production		1,1,1-trichloroethane
	Organic chemicals: distillation bottoms from		Organic chemicals: spent filter cartridges from
	the production of 1,1,1-trichloroethane		product purification from the production of
	Organic chemicals: distillation bottoms from		1,1-dimethylhydrazine (UDMH) from carbox-
,	the production of acetaldehyde from ethylene		ylic acid hydrazides

CAS Number	Name	CAS Number	Name
	Organic chemicals: still bottoms from the distil-		Pesticides: wastewater from the reactor and
	lation of benzyl chloride		spent sulfuric acid from the acid dryer from
	Organic chemicals: still bottoms from the puri-		the production of methyl bromide
	fication of ethylene dibromide in the produc-		Pesticides: wastewater from the washing and
	tion of ethylene dibromide via bromination of		stripping of phorate production
·	ethene		Pesticides: wastewater treatment sludge from
	Organic chemicals: stripping still tails from the		the production of chlordane
	production of methy ethyl pyridines		Pesticides: wastewater treatment sludge from
	Organic chemicals: vicinals from the purifica-		the production of phorate
	tion of toluenediamine in the production of		Pesticides: wastewater treatment sludge from
	toluenediamine via hydrogenation of dinitro-		the production of toxaphene
	toluene		Pesticides: wastewater treatment sludges from
	Organic chemicals: waste from the product		the production of disulfoton
	stream stripper in the production of 1,1,1-tri-		Pesticides: wastewater treatment sludges gener-
	chloroethane		ated in the production of creosote
	Organic chemicals: wastewater from the reactor		Petroleum refining: API separator sludge from
	vent gas scrubber in the production of ethy-		the petroleum refining industry
	lene dibromide via bromination of ethene		Petroleum refining: dissolved air flotation
	Organorhodium Complex (PMN-82-147)		(DAF) float from the petroleum refining in-
	2H-1,3,2-Oxazaphosphorine, 2 [bis (2-chloroe-		dustry
	thyl) amino] benzene-		Petroleum refining: heat exchanger bundle
	Pesticides: 2,6-Dichlorophenol waste from the		cleaning sludge from the petroleum refining
	production of 2,4–D		industry
	Pesticides: baghouse dust and floor sweepings		Petroleum refining: slop oil emulsion solids
	in milling and packaging operations from the		from the petroleum refining industry
	production or formulation of ethylenebisdi- thiocarbamic acid and its salts		Petroleum refining: tank bottoms (leaded) from the petroleum refining industry
	Pesticides: by-product salts generated in the		Phenol, 2,4—dinitro—6—methyl—salts
	production of MSMA and cacodylic acid		Phthalate esters
	Pesticides: filter cake from the filtration of		Polychlorinated biphenyls (PCBs)
	diethylphosphorodithoic acid in the produc-		Polychlorinated terphenyls
	tion of phorate		Polynuclear aromatic hydrocarbons
	Pesticides: filter solids from the filtration of		Primary aluminum: spent potliners from pri-
	hexachlorocyclopentadiene in the production		mary aluminum reduction
	of chlordane	****	Primary copper: acid plant blowdown slur-
	Pesticides: filtration, evaporation, and centrifu-		ry/sludge resulting from the thickening of
	gation solids from the production of ethylene-		blowdown slurry from primary copper produc-
	bisdithiocarbamic acid and its salts		tion
	Pesticides: heavy ends or distillation residues		Primary lead: surface impoundment solids con-
	from the distillation of tetrachlorobenzene in		tained in and dredged from surface impound-
	the production of 2,4,5–T		ments at primary lead smelting facilities
	Pesticides: process wastewater (including super-		Primary zinc: sludge from treatment of process
	mates, filtrates, and washwaters), from the		wastewater and/or acid plant blowdown from
	production of ethylenebisdithiocarbamic acid		primary zinc production
	and its salt		Pyridine, 2-[(2-dimethylamino)-2-thenylami-
	Pesticides: reactor vent scrubber water from the		no]-
	production of ethylenebisdithiocarbamic acid		Pyrophosphoric acid, tetraethyl ester
	and its salts		Quaternary ammonium compounds Radionuclides
	Pesticides: spent absorbent and wastewater sep-		Secondary lead: emission control dust/sludge
	arator solids from the production of methyl bromide		from secondary lead smelting
	Pesticides: still bottoms from toluene reclama-		Secondary lead: waste leaching solution from
	tion distillation in the production of disulfo-		acid leaching of emission control dust/sludge
	ton		from secondary lead smelting
	Pesticides: untreated process wastewater from		Selenium compounds
,	the production of toxaphene		Silver compounds
· ·	Pesticides: untreated wastewater from the pro-		Strychnine salts
	duction of 2,4–D		Thallium compounds
	Pesticides: vacuum stripper discharge from the		2,4,5–TP
	chlordane chlorinator in the production of		Veterinary pharmaceuticals: distillation tar resi-
	chlordane		dues from the distillation of aniline-based
	Pesticides: wastewater and scrub water from the		compounds in the production of veterinary
	chlorination of cyclopentadiene in the produc-		pharmaceuticals from arsenic or organo-ar-
	tion of chlordane		senic compounds

CAS Number	Name	CAS Number	Name
CAS Number	Veterinary pharmaceuticals: residue from the	56-55-3	1,2-Benzanthracene
	use of activated carbon for decolorization in	56-55-3	Benz[a]anthracene
	the production of veterinary pharmaceuticals	56-55-3	Benzo[a] anthracene
	from arsenic or organo-arsenic compounds	56-72-4	Coumephos
	Veterinary pharmaceuticals: wastewater treat-	57-12-5	Cyanide
	ment sludges generated during the production	57-14-7	Dimethylhydrazine
	of veterinary pharmaceuticals from arsenic or	57-24-9	Strychnidin-10-one-and salt
	organo-arsenic compounds	57-24-9	Strychnine
*	Wood preservation: bottom sediment sludge	57–47–6	Physostigmine
	from the treatment of wastewaters from wood	57–57–8	beta-Propiolactone
	preserving processes that use creosole and/or	57-64-7	Physostigmine, salicylate (1:1)
	pentachlorophenol	57–74–9 57, 74–0	Chlordene (Technical Minture and Matchalitae)
50.00.0	Zinc and compounds	57–74–9 57–74–9	Chlordane (Technical Mixture and Metabolites)
50-00-0 50-00-0	Formaldehyde Methylene oxide	57-74-9 57-97-6	Chlordane, alpha & gamma isomers 7,12–Dimethylbenz[a]anthracene
50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,	58-36-6	10, 10'-Oxybisphenoxarsine
. 30-07-7	6-amino-8-[[(aminocarbonyl)oxy]methl]-	58-89-9	gamma-BHC
	1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-	58-89-9	Hexachlorocyclohexane (gamma isomer)
	methyl,[1aS-(1aalpha,8beta,-	58-89-9	Lindane
	8aalpha,8balpha)]–	58-90-2	2,3,4,6–Tetrachlorophenol
50-07-7	Mitomycin C	59-50-7	4-Chloro-m-cresol
50-14-6	Ergocalciferol	59-50-7	P-Chloro-m-cresol
50-18-0	Cyclophosphamide	59-88-1	Phenylhydrazine hydrochloride
50-29-3	Dichloro diphenyl trichloroethane	59-89-2	N-Nitrosomorpholine
50-31-7	2.3.6-TBA and related polychlorbenzoic acid,	60-00-4	Ethylenediamine-tetraacetic acid (EDTA)
	dimethylamine salts	60-09-3	4-Aminoazobenzene
50-32-8	Benzo[a]pyrene	60-09-3	C.I. Solvent Yellow 1
50-55-5	11,17–Dimethoxy–18–[(3,4,5–trimethoxyben-	60–11–7	Dimethylaminoazobenzene
•	zoyl)oxy]-methyl ester, (3beta,16beta,17alpha,	60-29-7	Ethyl ether
50 55 5	18beta,20alpha)-yohimban-16-carboxylic acid	60-34-4	Methyl hydrazine
50-55-5	Reserpine	60–35–5 60–41–3	Acetamide Struckning sulfate
51–21–8 51–28–5	Fluorouracil	60-51-5	Strychnine, sulfate Dimethoate
51-26-3	2,4-Dinitrophenol 1,2-Benzenediol, 4-[1-hydroxy-2-(methylami-	60-57-1	Dieldrin
31-43-4	no) ethyl]-	61-82-5	Amitrole
51-43-4	Epinephrine	62-38-4	Phenylmercuric acetate
51-75-2	Mechlorethamine	62-44-2	N-4-Ethoxyphenyl acetamide
51-75-2	Nitrogen mustard	62-44-2	Phenacetin
51-79-6	Ethyl carbamate	62-50-0	Ethyl methanesulfonate
51-79-6	Urethane	62-53-3	Aniline
51-83-2	Carbachol chloride	62-53-3	Benzenamine
52-68-6	Trichlorfon	62–55–5	Ethanethioamide
52-85-7	Famphur	62–55–5	Thioacetamide
52-85-7	Phosphorothioic acid, O,O-dimethyl-O-[p-((di-	62–56–6	Carbamide, thio-
	methylamino)-sulfonyl)phenyl]ester	62–56–6	Thiourea
53-70-3	1,2:5,6-Dibenzanthracene	62-73-7	Dichlorvos Fluoroacetic acid, sodium salt
53-70-3	Dibenz[a,h]anthracene	62-74-8 62-74-8	Sodium fluoroacetate
53-70-3 52 06 3	Dibenzo[a,h]anthracene 2–Acetylaminofluorene	62-74-8 62-74-8	Sodium monofluoroacetate
53-96-3 53-96-3	N-2-Fluorenylacetamide	62-75-9	Dimethylnitrosamine
54–11–5	Nicotine	62-75-9	Nitrosodimethylamine
54-11-5	Pyridine, (s)-3-(1-methyl-2-pyrrolidinyl)	63-25-2	Carbaryl
54-62-6	Aminopterin	64-00-6	Phenol, 3–(1–methylethyl)–, methylcarbamate
55-18-5	N-Nitrosodiethylamine	64–18–6	Formic acid
55-21-0	Benzamide	64-18-6	Methanoic acid
55-38-9	Fenthion (conc. above 0.5%)	64-19-7	Acetic acid
55-63-0	Nitroglycerin	64-67-5	Diethyl sulfate
55-91-4	Isofluorphate	64-86-8	Colchicine
56-04-2	Methylthiouracil	65–30–5	Nicotine sulfate
56-23-5	Carbon tetrachloride	65–85–0	Benzoic acid
56-25-7	Cantharidin	66–75–1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloro-
56-33-1	4,4'-Stilbenediol, alpha, alpha'-diethyl-	66 75 1	ethyl)amino]-
56-35-9	Tributyltin	66–75–1	Uracil mustard
56-38-2 56-40-5	Parathion 3. Methylcholouthrane	66-81-9 67-56-1	Cycloheximide Methanol
56–49–5 56–53–1	3-Methylcholanthrene	67–63–0	Isopropyl alcohol (mfg-strong acid process)
30-33-1	Diethylstilbestrol	07-05-0	resolve his group and brocess)

CAS Number	Name	CAS Number	Name
67–64–1	Acetone	75-64-9	tert-Butylamine
67-64-1	2-Propanone	75-65-0	tert-Butyl alcohol
67-66-3	Chloroform	75-69-4	Trichloromonofluoromethane
67-66-3	Methane, trichloro-	75-70-7	Trichloromethanethiol
67-72-1	Hexachloroethane	75-71-8	Dichlorodifluoromethane
68-76-8	Triaziquone	75-74-1	Tetramethyllead
70–25–7	N-Methyl-N'-nitro-N-nitrosoguanidine	75-77-4	Trimethylchlorosilane
70–30–4	Hexachlorophene	75–78–5	Dimethyldichlorosilane
70–30–4	2,2'-Methylenebis (3,4,6-trichlorophenol)	75–79–6	Methyltrichlorosilane
70–69–9	p-Aminopropiophenone	75-86-5	Acetone cyanohydrin
71–36–3	n-Butyl alcohol	75-86-5	2-Methyllactonitrile
71–43–2	Benzene	75-87-6	Trichloroacetaldehyde
71–55–6	1,1,1–Trichloroethane	75-99-0	2,2-Dichloropropionic acid
71–63–6	Digitoxin	76-01-7	Pentachloroethane
72–20–8	Endrin	76-02-8	Trichloroacetyl chloride
72–43–5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-	76-13-1	Freon 113
72–43–5	meth- oxy-	76-44-8	Heptachlor
72–43–3 72–54–8	Methoxychlor Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-	76-44-8	Heptachlor (and epoxide)
12-34-0	chloro-	76-44-8	4,7-Methano-1 H-indené,1,4,5,6,7,8,8-hepte-
72–54–8	Dichlorodiphenyldichloroethane	•	chloro-3a,4,7,7a-tetrahydro-
72–55–9	DDE (1,1 Dichloro–2,2–bis(p–chlorophenyl)	76-87-9	Triphenyltin hydroxide (conc. above 10%)
12-33-7	ethylene)	77-47-4	Hexachlorocyclopentadiene
72-57-1	Trypan blue	77-78-1	Dimethyl sulfate
74–83–9	Methyl bromide	77-81-6	Tabun
74–87–3	Methyl chloride	78-00-2	Tetraethyllead
74–88–4	Methyl iodide	78-34-2	Dioxathion
74-89-5	Monomethylamine	78-53-5	Amiton
74-90-8	Hydrocyanic acid	78-59-1	Isophorone
74-90-8	Hydrogen cyanide	78–71–7	Oxetane, 3,3-bis(chloromethyl)-
74-93-1	Methanethiol	78-79-5	Isoprene
74-93-1	Methyl mercaptan	78-81-9	iso-Butylamine
74–93–1	Thiomethanol	78-82-0	Isobutyronitrile
74–95–3	Methylene bromide	78-83-1	Isobutyl alcohol
75-00-3	Chloroethane	78-84-2	Isobutyraldehyde
75-01-4	Vinyl chloride	78–87–5	Propylene dichloride
75-04-7	Monoethylamine	78–88–6	2,3-Dichloropropene
75–05–8	Acetonitrile	78-92-2	sec-Butyl alcohol
75–05–8	Ethanenitrile	78–93–3	2-Butanone
75–07–0	Acetaldehyde	78-93-3	Methyl ethyl ketone
75-07-0	Ethanal Dishloromethons	78-93-4	Methyl vinyl ketone
75–09–2 75–09–2	Dichloromethane Methylene chloride	78–97–7	Lactonitrile
75–15–0	Carbon bisulfide	78–99–9	1,1-Dichloropropane
75–15–0 75–15–0	Carbon disulfide	79–00–5	1,1,2-Trichloroethane
75–15–0 75–20–7	Calcium carbide	79–01–6	Trichloroethene
75–21–8	Ethylene oxide	79–01–6	Trichloroethylene
75–21–8	Oxirane	79–06–1	Acrylamide
75–25–2	Bromoform	79–09–4	Propionic acid
75-25-2	Tribromomethane	79–10–7	Acrylic acid
75-27-4	Dichlorobromomethane	79–11–8	Chloroacetic acid
75-34-3	1,1-Dichloroethane	79–19–6	Thiosemicarbazide
75–34–3	Ethylidene dichloride	79–21–0	Peracetic acid
75–35–4	1,1-Dichloroethylene	79–22–1	Methyl chlorocarbonate
75–35–4	Vinylidene chloride	79–31–2	iso-Butyric acid
75–36–5	Acetyl chloride	79–34–5	1,1,2,2-Tetrachloroethane
75–36–5	Ethanoyl chloride	79–44–7	Dimethylcarbamyl chloride
75–44–5	Carbonic dichloride	79–46–9	2-Nitropropane
75-44-5	Carbonyl chloride	80–05–7 80–15–0	4,4'-Isopropylidenediphenol
75–44–5	Phosgene	80–15–9	Cumene hydroperoxide
75–50–3	Trimethylamine	80–15–9 80–15–0	alpha, alpha-Dimethylbenzylhydroperoxide
75–55–8	2-Methylaziridine	80–15–9 80–62–6	Hydroperoxide, 1-methyl-1-phenylethyl-
75–55–8	Propyleneimine	80–62–6 80–63–7	Methyl 2 chlorogonilete
75-55-8 75-56-9	1,2-Propylenimine	80–63–7 81–07–2	Methyl 2-chloroacrylate
75–56–9 75–60–5	Propylene oxide Cacodylic acid	81–07–2 81–07–2	1,2–Benzisothiazolin–3–one, 1,1–dioxide Saccharin and salts
15-00-5	Cacouyiic acid	01-07-2	Saccitatin and salts

	CAS Number 81–81–2	Name 2H 1 Panganyuran 2 ana 4 hydrayy 2/3 aya	CAS Number 94–75–7	Name (2.4 Dichlorophenovy) scetic acid
	01-01-2	2H-1-Benzopyran-2-one, 4-hydroxy-3(3-oxo- 1-phenyl-butyl)-, and salts, when present at	94-75-7 94-79-1	(2,4–Dichlorophenoxy)acetic acid 2,4–D Esters
		concentrations greater than 0.3%	94-80-4	2,4-D Esters
	81-81-2	Warfarin	94–80–4	2,4-D, mixed butyl esters
	81-88-9	C.I. Food Red 15	95-47-6	o-Xylene
	82-28-0	1-Amino-2-methylanthraquinone	95-48-7	o-Cresol
	82-66-6	Diphacinone	95-50-1	1,2–Dichlorobenzene
	82–68–8	Pentachloronitrobenzene	95-50-1	o-Dichlorobenzene
	82–68–8	Quintozene	95–53–4	2-Amino-1-methylbenzene
	83-26-1	Pindone (conc. above 3%)	95–53–4	Benzenamine, 2-methyl- o-Toluidine
	83–32–9 84–66–2	Acenaphthene Diethyl phthalate	95–53–4 95–57–8	o-Poluidine o-Chlorophenol
	84-74-2	n-Butyl phthalate	95–63–6	1,2,4–Trimethylbenzene
	84-74-2	di-n-butyl phthalate	95–80–7	Benzenediamine, ar-methyl-
	85-00-7	Diquat	95-80-7	2,4-Diaminotoluene
	85-01-8	Phenanthrene	95-80-7	Toluenediamine
	85-44-9	1,2-Benzenedicarboxylic acid anhydride	95-94-3	1,2,4,5-Tetrachlorobenzene
	85-44-9	Phthalic anhydride	95-95-4	2,4,5–Trichlorophenol
	85–68–7	Butyl benzyl phthalate	96-09-3	Styrene oxide
	86–30–6	N-Nitrosodiphenylamine	96-12-8	1,2-Dibromo-3-chloropropane
	86-50-0 86-73-7	Azinphos-methyl Fluorene	96–18–4 96–33–3	1,2,3-Trichloropropane Methyl acrylate
	86-88-4	Antu	96–33–3 96–45–7	2–Imidazolidinethione
	86-88-4	alpha-Naphthylthiourea	97–18–7	Bithionol
•	87–62–7	2,6–Xylidine	97–56–3	C.I. Solvent Yellow 3
	87–65–0	2,6-Dichlorophenol	97-63-2	Ethyl Methacrylate
	87-68-3	Hexachloro-1,3-butadiene	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
	87–68–3	Hexachlorobutadiene	98-01-1	2–Furancarboxaldehyde
	87–68–5	Pentachlorophenol	98-01-1	Furfural
	88-05-1	Aniline, 2,4,6–trimethyl–	98-05-5	Benzenearsonic acid
	88-06-2	2,4,5-Trichlorophenol	98-07-7 98-09-9	Benzotrichloride
	88-06-2 88-72-2	2,4,6–Trichlorophenol o–Nitrotoluene	98-13-5	Benzenesulfonyl chloride Trichlorophenylsilane
	88–75–5	2–Nitrophenol	98–16–8	Benzenamine, 3–(trifluoromethyl)–
	88–75–5	o-Nitrophenol	98-82-8	Cumene
	88-85-7	Dinoseb	98-86-2	Acetophenone
	88-85-7	Phenol, 2,4-dinitro-6-(1-methylpropyl)	98-87-3	Benzal chloride
	88–85–7	Phenol, 2–(1–methylpropyl)–4,6–dinitro	98-88-4	Benzoyl chloride
	88-89-1	Picric acid	98-95-3	Nitrobenzene
	90-04-0	o-Anisidine	99-08-01	m-Nitrotoluene
	90–43–7 90–94–8	2–Phenylphenol Michler's ketone	99–35–4 99–55–8	sym-Trinitrobenzene 5–Nitro–o–toluidine
	91-08-7	Toluene-2,6-diisocyanate	99-59-2	5-Nitro-o-toluidine
	91–20–3	Naphthalene	99-65-0	m-Dinitrobenzene
	91–22–5	Quinoline	99-98-9	Dimethyl-p-phenylenediamine
	91-29-3	Naphthylamine	99-99-0	p-Nitrotoluene
	91-58-7	2-Chloronaphthalene	100-01-6	Benzenamine, 4-nitro-
	91-59-8	2–Naphthylamine	100-01-6	p–Nitroaniline
	91–80–5	Methapyrilene	100-02-7	p-Nitrophenol
	91–94–1	Dichlorobenzidine	100-14-1	Benzene, 1-(chloromethyl)-4-nitro-
	92–52–4	Biphenyl	100-21-0 100-25-4	Terephthalic acid p-Dinitrobenzene
	92-67-1 92-87-5	4–Aminobiphenyl Benzidine	100-23-4	Ethylbenzene
	92-93-3	4–Nitrobiphenyl	100-41-4	Styrene
	93-72-1	Silvex	100-44-7	Benzyl chloride
	93-76-5	(2,4,5–Trichlorophenoxy)acetic acid	100-47-0	Benzonitrile
	93-79-8	(2,4,5-Trichlorophenoxy)acetic acid esters	100-75-4	N-Nitrosopiperidine
	94–11–1	2,4–D Esters	101–14–4	4,4'-Methylenebis(2-chloroaniline)
	94-11-1	2,4-D, isopropyl ester	101–55–3	4–Bromophenyl phenyl ester
	94–36–0	Benzoyl peroxide	101-61-1	4,4'-Methylenebis(N,N-dimethyl)benzenamine
	94–58–6	Benzene, 1,2-methylenedioxy-4-propenyl-	101–68–8	Methylenebis(phenylisocyanate) 4,4'-Methylenedianiline
	94–58–6 94–58–6	1,3 Benzodioxole, 5–propyl– Dihydrosafrole	101–77–9 101–80–4	4,4'-Diaminodiphenyl ether
	94–38–6 94–59–7	Benzene, 1,2-methylenedioxy-4-allyl-	102-36-3	Isocyanic acid, 3,4–dichlorophenyl ester
	94–59–7	1,3-Benzodioxole, 5-(2-propenyl)-	103-23-1	Bis(2-ethylhexyl) adipate
	94-59-7	Safrole	103-85-5	Phenylthiourea

CAS Number	Name	CAS Number	Name
104-94-9	p-Anisidine	109-61-5	Propyl chloroformate
105-46-4	sec-Butyl acetate	109-73-9	Butylamine
105-67-9	2,4–Dimethylphenol	109–77–3	Melononitrile
106-42-3	p-Xylene	109–77–3	Propanedinitrile
106-44-5	p-Cresol	109-86-4	2–Methoxyethanol
106–46–7	1,4-Dichlorobenzene	109-89-7	Diethylamine
106–46–7	p-Dichlorobenzene	109-99-9	<u>Tetrahydrofuran</u>
106–47–8	p-Chloroaniline	110-00-9	Furan
106-49-0	4-Amino-1-methylbenzene	110-00-9	Furfuran
106-49-0	Benzenamine, 4-methyl-	110–16–7	Maleic acid
106-49-0	p-Toluidine	110-17-8	Fumaric acid
106-50-3	p-Phenylenediamine	110–19–0 110–57–6	iso-Butyl acetate
106–51–4 106–51–4	p-Benzoquinone 2,5-Cyclohexadiene-1,4-dione	110-37-8	Trans-1,4-dichlorobutene 2-Chloroethyl vinyl ether
106-51-4	Quinone	110-75-8	2–Ethoxyethanol
106-88-7	1,2-Butylene oxide	110-82-7	Benzene, hexahydro
106-89-8	Epichlorohydrin	110-82-7	Cyclohexane
106-93-4	Ethylene dibromide	110-86-1	Pyridine
106–96–7	Propargyl bromide	110-89-4	Piperidine
106-99-0	1,3-Butadiene	111-42-2	Diethanolamine
107-02-8	Acrolein	111-44-4	Dichloroethyl ether
107-05-1	Allyl chloride	111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
107-06-2	1,2-Dichloroethane	111-69-3	Adiponitrile
107-06-2	Ethylene dichloride	111–91–1	Bis(2-chloroethoxy) methane
107-10-8	1–Propanamine	111–91–1	Dichloromethoxy ethane
107-10-8	n-Propylamine	111–91–1	Ethane, 1,1'-[methylenebis(oxy)] (2-chloro-
107–12–0	Ethyl cyanide	112–56–1	Lethane 384 (conc. above 10%)
107–12–0	Propanenitrile	114-26-1	Propoxur
107–13–1	Acrylonitrile	115-02-6	Azaserine
107–13–1	2-Propenenitrile	115-07-1	Propylene (Propene)
107–15–3	Ethylenediamine	115-21-9	Trichloroethylsilane
107–16–4	Formaldehyde cyanohydrin	115-26-4	Dimefox
107-18-6	Allyl alcohol	115-29-7	Endosulfan
107–18–6 107–19–7	2-Propen-1-ol Propargyl alcohol	115–32–2 115–32–2	Dicofol Kelthane
107–19–7	Chloroacetaldehyde	115-52-2	Fensulfothion
107-21-1	Ethylene glycol	116-06-3	Aldicarb
107-30-2	Chloromethyl methyl ether	116-29-0	Chloranil
107-44-8	Sarin	117-52-2	Coumafuryl (conc. above 3%)
107-49-3	Diphosphoric acid, tetraethyl ester	117-79-3	2–Aminoanthraquinone
107-49-3	Pyrrole, tetrahydro-N-nitroso-	117-80-6	Dichlone
107-49-3	Tetraethylpyrophosphate	117-81-7	Bis(2-ethylhexyl)phthalate
107-92-6	Butyric acid	117-84-0	1,2,-Benzenedicarboxylic acid, di-n-octyl ester
108-05-4	Vinyl acetate	117-84-0	Di-n-octyl phthalate
108-05-4	Vinyl acetate monomer	118–74–1	Hexachlorobenzene
108–10–1	Methyl isobutyl ketone	119–38–0	Isopropylmethylpyrazolyl dimethylcarbamate
108-23-6	Isopropyl chloroformate	119-90-4	3,3'-Dimethoxybenzidine
108-24-7	Acetic anhydride	119-93-7	3,3'-Dimethylbenzidine
108–31–6	Maleic anhydride	120–12–7	Anthracene
108-38-3	m-Xylene	120-58-1	Isosafrole
108-39-4 108-46-3	m-Cresol 1,3-Benzenediol	120–71–8 120–80–9	p-Cresidine Catechol
108-46-3	Resorcinol	120-80-9	1,2,4–Trichlorobenzene
108-40-3	Bis(2–chloroisoprophyl)ether	120-82-1	2,4–Dichlorophenol
108-60-1	Bis(2-chloro-1-methylethyl)ether	121-14-2	Benzene, 1-methyl-2,4-dinitro-
108-60-1	Dichloroisopropyl ether	121-14-2	2.4–Dinitrotoluene
108-60-1	Propane, 2,2'-oxybis(2-chloro-	121-21-1	Pyrethrins
108-62-3	Metaldehyde	121–29–9	
108-88-3	Toluene	121-44-8	Triethylamine
108-90-7	Chlorobenzene	121-69-7	N,N-Dimethylaniline
108-91-8	Cyclohexylamine	121-75-5	Malathion
108-94-1	Cyclohexanone	122-09-8	Benzeneethanamine,alpha,alpha-dimethyl
108-95-2	Phenol	122-09-8	alpha, alpha-Dimethylphenethylamine
108-98-5	Benzenethiol	122-09-08	Ethanamine, 1,1-dimethyl-2-phenyl-
109-98-5	Thiophenol	122-10-1	Bomyl (conc. above 1%)
109–06–8	2–Picoline	122–14–5	Fenitrothion

CAS Number	Name	CAS Number	Name
122-39-4	Diphenylamine	151–38–2	Methoxyethylmercuric acetate
122-66-7	Diphenylhydrazine	151–50–8	Potassium cyanide
122-66-7	1,2-Diphenylhydrazine	151-56-4	Ethylenimine
123-31-9	Hydroquinone	152-16-9	Octamethyl pyrophosphoramide
123-33-1	1,2–Dihydro–3,6–pyradizinedione	156-10-5	p-Nitrosodiphenylamine
123-33-1	Maleic hydrazide	156-60-5	1,2-Dichloroethylene (E)
123–38–6	Propionaldehyde	156-62-7	Calcium cyanamide
123-62-6	Propionic anhydride	189–55–9	Benzo[rst]pentaphene
123–63–7 123–63–7	Paraldehyde 1,3,5–Trioxane,2,4,6–Trimethyl–	189–55–9 189–55–9	1,2:7,8-Dibenzopyrene Dibenz[a,i]pyrene
123-03-7	Butyraldehyde	191–24–2	Benzo[ghi]perylene
123-72-6	Butyl acetate	193–39–5	Indeno(1,2,3-cd)pyrene
123-91-1	1,4-Dioxane	193–39–5	1,10–(1,2–Phenylene)pyrene
123-92-2	iso-Amyl acetate	205-99-2	Benzo(b)fluoranthene
124-04-9	Adipic acid	206-44-0	Benzo[j,k]fluorene
124-40-3	Dimethylamine	206440	Fluorathene
124-41-4	Sodium methylate	207-08-9	Benzo(k) fluoranthene
124-48-1	Chlorodibromomethane	208–96–8	Acenaphthylene
124-65-2	Sodium cacodylate	218-01-9	1,2-Benzphenanthrene
124–87–8 126–72–7	Picrotoxin 1,Propanol,2,3-dibromo-, phosphate (3:1)	218-01-9 225-51-4	Chrysene 3,4–Benzacridine
126-72-7	Tris(2,3-dibromopropyl) phosphate	225-51-4	Benz[c]acridine
126-98-7	Methacrylonitrile	2310-17-0	Phosalone
126–98–7	2-Propenitrile, 2-methyl-	297–78–9	Isobenzan
126-99-8	2-Chloro,1,3-butadiene	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
126-99-8	Chloroprene	297-97-2	Thionazin
127-18-4	Perchloroethylene	29800-0	Methyl parathion
127–18–4	Tetrachloroethylene	298-02-2	Phorate
127-82-2	Zinc phenolsulfonate	298-04-4	Disulfoton
128-66-5	C.I. Vat Yellow 4	300-62-9	Amphetamine
129-00-0	Pyrene Warfarin sodium	300–76–5 301–04–2	Naled Lead acetate
129-06-6 130-15-4	1,4–Naphthalenedione	301-04-2	Lead acetic acid
130–15–4	1,4–Naphthoquinone	302-01-2	Diamine
131–11–3	Dimethyl phthalate	302-01-2	Hydrazine
131-74-8	Ammonium picrate	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2
131-89-5	2–Cyclohexyl-4,6–dinitrophenol		(1-methoxethyl)-3-methyl-1-oxobutoxy]
132-64-9	Dibenzofuran		methyl]-2,3,5,7a-tetrahydro-1H-pyrroliz
133-06-2	Captan		in-1-yl ester, [1S (1alpha-(Z),72s,3R), 7aal-
133-90-4	Chloramben	202 24 4	pha]]-
134-29-2	o-Anisidine hydrochloride	303–34–4 305–03–3	Lasiocarpine Chlorambucil
134–32–7 135–20–6	1-Naphthlamine Cupferron	309-00-2	Aldrin
137-26-8	Thiram	311-45-5	Diethyl-p-nitrophenyl phosphate
139–13–9	Nitrilotriacetic acid	315–18–4	Mexacarbate
139-65-1	4,4'–Thiodianiline	316-42-7	Emetine, dihydrochloride
140-29-4	Benzyl cyanide	319-84-6	alpha-BHC
140-56-7	Fenaminosulf (conc. above 5%)	319–85–7	beta-BHC
140-76-1	Pyridine, 2-methyl-5-vinyl-	319–86–8	delta-BHC
140-88-5	Ethyl acrylate	327–98–0	Trichloronate
140-88-5	2-Propenoic acid, ethyl ester	329-71-5	2,5–Dinitrophenol
141–32–2	Butyl acrylate	330–54–1 333–41–5	Diuron Diazinon
141–66–2 141–78–6	Dicrotophos Ethyl acetate	334-88-3	Diazomethane
142-28-9	1,3–Dichloropropane	353-42-4	Boron trifluoride compound with methyl ether
142–71–2	Cupric acetate		(1:1)
142–84–7	Dipropylamine	353-50-4	Carbonic difluoride
143-33-9	Sodium cyanide	353-50-4	Carbon oxyfluoride
143-50-0	Kepone	353-50-4	Carbonyl fluoride
144-49-0	Fluoroacetic acid	357–57–3	Brucine
140–56–7	Fenaminosulf	359-06-8	Fluoroacetyl chloride
145-73-3	Endothall	371–62–0 370, 70, 3	Ethylene fluorohydrin
148–82–3	Alanine, 3-[p-bis(-chloroethyl) amino]	379-79-3 460-19-5	Ergotamine tartrate Cyanogen
148-82-3	phenyl]–,L– Melphalan	460–19–5	Ethanedinitrile
146–62–3 149–74–6	Dichloromethylphenylsilane	463-58-1	Carbonyl sulfide
117 17 0		_	•

CAS Number	Name	CAS Number	Name
465–73–6	Isodrin	557-21-1	Zinc cyanide
470-90-6	Chlorfenvinfos	557–34–6	Zinc acetate
492–80–8	Auramine	557-41-5	Zinc formate
492–80–8	Benzenamine, 4,4'- carbonimidoylbis(N,N-di-	558-25-8	Methanesulfonyl fluoride
400 00 0	methyl-	563-12-2	Ethion
492–80–8	C.I.Solvent Yellow 34	563-41-7	Semicarbazide hydrochloride
494-03-1	Chlornaphazine	563-68-8	Thallium (I) acetate
496–72–0	Benzenediamine, ar-methyl-	563-68-8	Thallium (I) acetic acid, salt
496–72–0	Toluenediamine	569–64–2	C.I. Basic Green 4
502–39–6 504–34–5	Methylmercuric dicyanamide	573–56–8	2,6-Dinitrophenol
504-24-5 504-24-5	4-Aminopyridine	578-94-9 584-84-0	Phenarsazine chloride
504–24–5 504–24–5	Avitrol	584-84-9 591-08-2	Toluene-2,4-diisocyanate
504-60-9	4–Pyridinamine 1–Methylbutadiene	591-08-2	1-Acetyl-2-thiourea N-Aminothioxomethyl acetamide
504-60-9	1,3–Pentadiene	592-01-8	Calcium cyanide
505-60-2	Mustard gas	592-04-1	Mercuric cyanide
506-61-6	Potassium silver cyanide	592-85-8	Mercuric thiocyanate
506-64-9	Silver cyanide	592–87–0	Lead thiocyanate
506-68-3	Bromine cyanide	594-42-3	Perchloromethylmercaptan
506-68-3	Cyanogen bromide	594–42–3	Trichloromethanesulfenyl chloride
506-77-4	Chlorine cyanide	597–64–8	Tetraethyltin
506-77-4	Cyanogen chloride	598-31-2	Bromoacetone
506-78-5	Cyanogen iodide	606–20–2	Benzene, 1-methyl-2,6-dintro-
506-87-6	Ammonium carbonate	606-20-2	2,6–Dinitrotoluene
506-96-7	Acetyl bromide	606-73-1	Hexachlorocyclohexane (all isomers)
507-60-8	Red squill (conc. above 30%)	608-73-1	BHC
509-14-8	Tetranitromethane	608-93-5	Pentachlorobenzene
510-15-6	Chlorobenzilate	609-19-8	3,4,5-Trichlorophenol
514-73-8	Dithiazanine iodide	610-39-9	3,4-Dinitrotoluene
528-29-0	o-Dinitrobenzene	614-78-8	Thiourea, (2-methylphenyl)-
532-27-4	2-Chloroacetophenone	615-05-4	2,4-Diaminoanisole
533-23-3	2,4-D Ethyl ester	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
534-07-6	Bis(chloromethyl) ketone	615-53-2	N-Nitroso-N-methylurethane
534-52-1	4,6-Dinitro-o-cresol	616-23-9	n-,2,3 Dichloropropanol
535-89-7	Crimidine	621–64–7	Di-n-propylnitrosamine
538-07-8	Ethylbis(2-chloroethyl)amine	621–64–7	N–Nitrosodi–n–propylamine
540-59-0	1,2–Dichloroethylene	624-83-9	Isocyanic acid, methylester
540-73-8	1,2–Dimethylhydrazine	624-83-9	Methane, isocyanato-
540-88-5	tert-Butyl acetate	624–83–9	Methyl isocyanate
541-09-3	Uranyl acetate	625–16–1	tert-Amyl acetate
541-25-3	Lewisite	626–38–0	sec-Amyl acetate
541–41–3	Ethyl chloroformate	627–11–2	Chloroethyl chloroformate
541–53–7	Dithiobiuret	628-63-7	Amyl acetate
541–53–7	Thioimidodicarbonic diamide	628-86-4	Fulminic acid, mercury(II) salt
541-73-1	m-Dichlorobenzene	628-86-4	Mercury fulminate
541–73–1 542–62–1	1,3–Dichlorobenzene Barium cyanide	630–10–4 630–20–6	Selenourea
542-75-6	Dichloropropene	630-60-4	1,1,1,2–Tetrachloroethane Ouabain
542-75-6	1,3–Dichloropropene	631–61–8	Ammonium acetate
542–75–6	1,3-Dichloropropylene	636–21–5	Benzenamine, 2-methyl- hydrochloride
542-76-7	3–Chloropropionitrile	636-21-5	o-Toluidine hydrochloride
542-76-7	Propanenitrile, 3-chloro-	639–58–7	Triphenyltin chloride
542-88-1	Bis(chloromethyl) ether	640–19–7	Fluoroacetamide
542-88-1	Chloromethyl ether	644–64–4	Dimetilan
542-88-1	Dichloromethyl ether	675–14–9	Cyanuric fluoride
542-88-1	Methane, oxybis (chloro)-	676–97–1	Methyl phosphonic dichloride
542-90-5	Ethylthiocyanate	680–31–9	Hexamethylphosphoramide
543-90-8	Cadmium acetate	684-93-5	Carbamide, N-methyl-N-nitroso-
544-18-3	Cobaltous formate	684–93–5	N-Nitroso-N-methylurea
544-92-3	Copper cyanide	684–93–5	Urea, N-methyl-N-nitroso-
554-84-7	m-Nitrophenol	692-42-2	Diethylarsine
555-77-1	Tris(2-chloroethyl)amine	696-28-6	Arsonous dichloride, phenyl-
556-52-5	2,3-Epoxy-1-propanol	696-28-6	Dichlorophenylarsine
556-61-6	Methyl isothiocyanate	696-28-6	Phenyl dichloroarsine
556-64-9	Methyl thiocyanate	732116	Phosmet
557–19–7	Nickel cyanide	757–58–4	Hexaethyl tetraphosphate

CAS Number	Name	CAS Number	Name
757–58–4	Tetraphosphoric acid, hexaethyl ester	1314-32-5	Thallium oxide
759–73–9	Carbamide, N-ethyl-N-nitroso-	1314–56–3	Phosphorus pentoxide
759–73–9	N-Nitroso-N-ethylurea	1314-62-1	Vanadium oxide
759–73–9 760–93–0	Urea, N-ethyl-N-nitroso-	1314-62-1	Vanadium pentoxide
764–41–0	Methacrylic anhydride 1,4–Dichloro–2–butene	1314–64–3 1314–80–3	Uranyl sulfate Phosphorus pentasulfide
765–34–4	Glycidylaldehyde	1314-80-3	Phosphorus sulfide
765–34–4	Oxiranecarboxyal dehyde	1314-80-3	Sulfur phosphide
786–19–6	Carbophenothion	1314-84-7	Zinc phosphide
814-49-3	Diethyl chlorophosphate	1314-84-7	Zinc phosphide, when present at concentration
814–68–6	Acrylyl chloride		greater than 10 percent
815-82-7	Cupric tartrate	1314-87-0	Lead sulfide
823-40-5	Benzenediamine, ar-methyl-	1314–96–1	Strontium sulfide
823–40–5 824–11–3	Toluenediamine Trimethylolpropane phosphite	1319–72–8 1319–77–3	2,4,5–T amines
842–07–9	C.I. Solvent Yellow 14	1319-77-3	Cresol(s) Cresol (mixed isomers)
900–95–8	Stannane, acetoxytriphenyl-	1319-77-3	Phenol, methyl-
919-86-8	Methyl demeton	1320-18-9	2,4–D Esters
920-46-7	Methacryloyl chloride	1321-12-6	Nitrotoluene
924-16-3	N-Nitrosodi-n-butylamine	1327-53-3	Arsenic trioxide
930–55–2	N-Nitrosopyrrolidine	1330–20–7	Xylene
930–55–2	Pyrrolidine, 1-nitroso-	1330-20-7	Xylene (mixed isomers)
933–75–5	2,3,6-Trichlorophenol	1330-20-7	Xylenes
933788 944229	2,3,5-Trichlorophenol Fonofos	1332–07–6 1332–21–4	Zinc borate Asbestos
944-22-9	Phosfolan	1333-82-0	Chromic acid
950–10–7	Mephosfolan	1333-83-1	Sodium bifluoride
950–37–8	Methidathion	1335–32–6	Lead, bis(acetato-O)tetrahydroxytn-
959-98-8	alpha-Endosulfan	1335-32-6	Lead subacetate
961–11–5	Tetrachlorvinphos	1335-87-1	Hexachloronaphthalene
989–38–8	C.I. Basic Red 1	1336–21–6	Ammonium hydroxide
991–42–4	Norbormide	1336–36–3	Polychlorinated biphenyls (PCBs)
998–30–1	Triethoxysilane	1338–23–4	2-Butanone peroxide
999-81-5 1024-57-3	Chlormequat chloride Heptachlor epoxide	1338–23–4 1338–24–5	Methyl ethyl ketone peroxide Naphthenic acid
1024-37-3	Endosulfan sulfate	1341-49-7	Ammonium bifluoride
1031–47–6	Triamiphos	1344–28–1	Aluminum oxide
1066-30-4	Chromic acetate	1397–94–0	Antimycin A
1066-33-7	Ammonium bicarbonate	1420-07-1	Dinoterb
1066-45-1	Trimethyltin chloride	1464–53–5	2,2'-Bloxirane
1072-35-1	Lead stearate	1464–53–5	1,2:3,4–Diepoxybutane
1111-78-0	Ammonium carbamate	1464–53–5	Diepoxybutane
1113-38-8	Ammonium oxalate	1558-25-4	Trichloro(chloromethyl)silane
1116–54–7 1116–54–7	Ethanol, 2,2'-(nitrosoimino)bis N-Nitrosodiethanolamine	. 1563–66–2 1582–09–8	Carbofuran Trifluralin
1120-71-4	1,2–Oxathiolane, 2,2–dioxide	1596-84-5	Alar
1120-71-4	1,3-Propane sultone	1596-84-5	Daminozide
1122-60-7	Nitrocyclohexane	1600-27-7	Mercuric acetate
1124-33-0	Pyridine, 4-nitro-, 1-oxide	1615-80-1	N,N'-Diethylhydrazine
1129-41-5	Metolcarb	1622–32–8	Ethanesulfonyl chloride, 2-chloro-
1163–19–5	Decabromodiphenyl oxide	1634-04-4	Methyl tert-butyl ether
1185–57–5	Ferric ammonium citrate	1642–54–2	Diethylcarbamazine citrate
1194-65-6	Dichlobenil Vylanal	1689–84–5	Bromoxynil 2,4–D mixed isobutyl esters
1300–71–6 1303–28–2	Xylenol Arsenic pentoxide	1713–15–1 1746–01–6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
1303-28-2	Arsenic disulfide	1752–30–3	Acetone thiosemicarbazide
1303–33–9	Arsenic trisulfide	1762-95-4	Ammonium thiocyanate
1303-36-2	Arsenic (III) oxide	1836-75-5	Nitrofen
1306-19-0	Cadmium oxide	1836-75-5	TOK (2,4 dichlorophenyl-p-nitrophenyl)
1309-64-4	Antimony trioxide	1863-63-4	Ammonium benzoate
1310-58-3	Potassium hydroxide	1888-71-7	Hexachloropropene
1310-73-2	Sodium hydroxide	1897-45-6	Chlorothalonil
1313-27-5	Molybdenum trioxide	1910-42-5	Paraquat Dicamba
1313–82–8 1314–20–1	Sodium sulfide Thorium dioxide	1918–00–9 1928–38–7	2,4–D Esters
1314-20-1	Thallic oxide	1928–38–7	2,4–D Listers 2,4–D Methyl ester
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CAS Number	Name	CAS Number	Name
1928–43–4	2,4-D 2-ethylhexyl ester (conc. above 20%)	3615–21–2	Benzimidazole, 4,5-dichloro-2-(trifluoro-
1928-45-6	2,4-D, Propylene glycol butyl ether esters (conc.		methyl)-
	above 20%)	3689–24–5	Sulfotep
1928–47–8	2,4,5–T esters	3689–24–5	Tetraethyldithiopyrophosphate
1928–61–6	2,4-D Esters	3689–24–5	Thiodiphosphoric acid, tetraethyl ester
1929-73-3	2,4–D butoxyethanol ester (conc. above 20%)	3691–35–8	Chlorophacinone
1937-37-7	C.I. Direct Black 38	3734-97-2	Amiton oxalate
1982-47-4	Chloroxuron	3735–23–7	Methyl phenkapton
2001-95-8	Valinomycin	3761–53–3	C.I. Food Red 5
2008-39-1	2,4-D Dimethylamine salt (conc. above 20%)	3813-14-7	2,4,5–T amines
2008-46-0	2,4,5–T amines	3861-41-4	Bromoxynil butyrate
2032-65-7	Mercaptodimethur	3878-19-1	Fuberidazole
2032-65-7	Methiocarb	4044-65-9	Bitoscanate
2074-50-2	Paraquat methosulfate	4098-71-9	Isophorone diisocyanate
2097-19-0	Phenylsilatrane	4104-14-7	Phosacetim
2104-64-5	EPN	4170-30-3	2-Butenel
2164-17-2	Fluometuron	4170-30-3	Crotonaldehyde
2223-93-0	Cadmium stearate	4301-50-2	Fluenetil
2231-57-4	Thiocarbazide	4418-66-0	Phenol, 2,2'-thiobis[4-chloro-6-methyl-
2234-13-1	Octachloronaphthalene	4549-40-0	N-Nitrosomethylvinylamine
2238-07-5	Diglycidyl ether	4680-78-8	C.I. Acid Green 3
2275–18–5	Prothoate	4835-11-4	Hexamethylenediamine, N,N'-dibutyl-
2303-16-4	Di-allate	5344-82-1	1-(o-Chlorophenyl)thiourea
2303-16-4	S-(2,3-Dichloroallyl) diisopropylthiocarbamate	5742-19-18	2,4-D Diethanolamine salt (conc. above 20%)
2310-17-0	Phosalone (conc. above 12%)	5836-29-3	Coumatetralyl
2312–35–8	Propargite	5893-66-3	Cupric oxalate
2385-85-5	Mirex	6164–98–3	Chlordimeform
2497–07–6	Oxydisulfoton	6369–96–6	2,4,5–T amines
2524-03-0	Dimethyl phosphorochloridothioate	6369-97-7	<u></u>
2540-82-1	Formothion	6484–52–2	Ammonium nitrate
2545–59–7	2,4,5–T esters	6484-52-2	Ammonium nitrate (solution)
2570–26–5	Pentadecylamine	6533-73-9	Carbonic acid, dithallium(I) salt
2587–90–8	Phosphorothioic acid, 0,0-dimethyl-5-(2-	6533-73-9	Thallium(I) carbonate
2367-90-6	(methylthio)ethyl)es	6533-73-9	Thallous carbonate
2602-46-2	C.I. Direct Blue 6	6923-22-4	Monocrotophos
2631-37-0	Promecarb	7005-72-3	4–Chlorophenyl phenyl ether
2636-26-2		7421-93-4	Endrin aldehyde
	Cyanophos Azinphos-ethyl	7428-48-0	Lead stearate
2642-71-9 2665-30-7	Phosphonothioic acid, methyl-, 0-(4-nitro-	7429–90–5	Aluminum (fume or dust)
2003-30-7		7439–92–1	Lead
2702-72-9	phenyl) 0-phenyl es 2,4–D Sodium salt (conc. above 20%)	7439–92–1	Manganese
2702-72-9	Phosphonothioic acid, methyl-, 0-ethyl 0-	7439–90–3	Mercury
2703-13-1	(4–(methylthio)phen	7439–97–6	Mercury compounds
2757-18-8	Thellous melanete	7440-02-0	Nickel
	Thallous malonate 5–(Aminomethyl)–3–isoxazolol	7440-02-0	Silver
2763–96–4 2763–96–4	3(2H)-isoxazolone, 5-(aminomethyl)-	7440-22-4	Sodium
	Muscimol	7440-28-0	Thallium
2763-96-4	Endothion	7440-26-0	Antimony
2778-04-3 2832-40-8	C.I. Disperse Yellow 3	7440-38-2	Anumony Arsenic
	Chlorpyrifos	7440-38-2	Inorganic arsenic
2921–88–2 2939–80–2	Captafol	7440-39-3	Barium
	Ferric ammonium oxalate	7440-41-7	Beryllium
2944–67–4 2971–38–2	2,4–D Esters	7440-41-7	Beryllium compounds
3012-65-5	Ammonium citrate, dibasic	7440-41-7	Beryllium dust
	Silane, (4-aminobutyl)diethoxymethyl-	7440–43–9	Cadmium
3037-72-7	C.I. Solvent Orange 7	7440–43–9	Cadmium products
3118-97-6	Ammonium tartrate	7440-47-3	Chromium
3164-29-2	Benzenamine, 4–chloro– 2–methyl–, hydrochlo-	7440-47-3	Cobalt
3165–93–3	ride		
2165 02 2		7440–50–8	Copper Vanadium (fume or dust)
3165-93-3	4–Chloro–o–toluidine hydrochloride	7440–62–2	Vanadium (fume or dust)
3251–23–8 3254–63–5	Cupric nitrate Phosphoric acid, dimethyl 4–(methylthio) phenyl	7440-66-6 7446-08-4	Zinc (fume or dust)
3254–63–5		7446-08-4	Selenium dioxide
2200 50 2	ester	7446-08-4	Selenium oxide
3288-58-2 3486 35 0	0,0-Diethyl S-methyl dithiophosphate Zinc carbonate	7446-09-5 7446-11-9	Sulfur dioxide Sulfur trioxide
3486-35-9 3569-57-1	Sulfoxide, 3-chloropropyl octyl	7446-11-9 7446-14-2	
3569–57–1	Sunoxide, 3-cinoropropyi octyr	/440-14-2	Lead sulfate

CAS Number	Name (1)	CAS Number	Name
7446–18–6 7446–18–6	Sulfuric acid, dithallium(1+) salt Sulfuric acid, thallium(I) salt	7783–49–5 7783–50–8	Zinc fluoride Ferric fluoride
7446–18–6	Thallium sulfate	7783–56–4	Antimony trifluoride
7446–18–6	Thallous sulfate	7783-60-0	Sulfur tetrafluoride
7446-27-7	Lead phosphate	7783-70-2	Antimony pentafluoride
7446-27-7	Phosphoric acid, lead salt	7783-80-4	Tellurium hexafluoride
7446–34–6	Sulfur selenide	7784–34–1	Arsenous trichloride
7447–39–4	Cupric chloride	7784-41-0	Potassium arsenate
7487–94–7	Mercuric chloride Selenium disulfide	7784-42-1	Arsine
7488–56–4 7488–56–4	Selenium disumde Selenium sulfide	7784–46–5 7786–34–7	Sodium arsenite Mevinphos
7550-45-0	Titanium tetrachloride	7786-81-4	Nickel sulfate
7558-79-4	Sodium phosphate, dibasic	7787–47–5	Beryllium chloride
7580-67-8	Lithium hydride	7787-49-7	Beryllium fluoride
7601–54–9	Sodium phosphate, tribasic	7788-98-9	Ammonium chromate
7631–89–2	Sodium arsenate	7789–00–6	Potassium chromate
7631–90–5	Sodium bisulfite	7789-06-2	Strontium chromate
7632–00–0 7637–07–2	Sodium nitrite	7789-09-5	Ammonium bichromate Cadmium bromide
7637-07-2 7646-85-7	Boron trifluoride Zinc chloride	7789–42–6 7789–43–7	Cobaltous bromide
7647-01-0	Hydrochloric acid	7789–61–9	Antimony tribromide
7647-01-0	Hydrogen chloride	7790–94–5	Chlorosulfonic acid
7647-18-9	Antimony pentachloride	7791-12-0	Thallium chloride
7664-38-2	Phosphoric acid	7791-12-0	Thallous chloride
7664–39–3	Hydrofluoric acid	7791–23–3	Selenium oxychloride
7664–39–3	Hydrogen fluoride	7803–49–8	Hydroxylamine
7664-41-7	Ammonia	7803–51–2	Hydrogen phosphide
7664–93–9 7681–49–4	Sulfuric acid Sodium fluoride	7803–51–2 7803–55–6	Phosphine Ammonium vanadate
7681–52–9	Sodium hypochlorite	7803–55–6	Vanadic acid, ammonium salt
7697–37–2	Nitric acid	7803-65-8	Ammonium hypophosphite
7699–45–8	Zinc bromide	8001-35-2	Camphechlor
7705-08-0	Ferric chloride	8001-35-2	Camphene, octachloro-
7718–54–9	Nickel chloride	8001-35-2	Toxaphene
7719–12–2	Phosphorus trichloride	8001–50–1	Strobane
7720–78–7	Ferrous sulfate	8001–58–9	Creosote Dichloropropene–Dichloropropene (mixture)
7722–64–7 7722–84–1	Potassium permanganate Hydrogen peroxide (Conc. 52%)	8003–19–8 8003–34–7	Pyrethrins
7723-14-0	Phosphorus	8065-48-3	Demeton
7726-95-6	Bromine	9004-66-4	Ferric dextran
7727-54-0	Ammonium persulfate	9004-66-4	Iron dextran
7733-02-0	Zinc sulfate	10025-73-7	Chromic chloride
7758–94–3	Ferrous chloride	10025-87-3	Phosphorous oxychloride
7758–95–4	Lead chloride	10025-91-9	Antimony trichloride
7758-98-7 7761-88-8	Cupric sulfate Silver nitrate	10026–11–6 10026–13–8	Zirconium tetrachloride Phosphorous pentachloride
7773-06-0	Ammonium sulfamate	10028-15-6	Ozone
7775-09-9	Sodium chlorate (conc. above 7%)	10028-22-5	Ferric sulfate
7775–11–3	Sodium chromate	10031-59-1	Sulfuric acid, dithallium(1+) salt
7778-39-4	Arsenic acid	10031-59-1	Thallium sulfate
7778–44–1	Calcium arsenate	10034–93–2	Hydrazine sulfate
7778–50–9	Potassium bichromate	10043-01-3	Aluminum sulfate
7778–54–3	Calcium hypochlorite	10045-89-3	Ferrous ammonium sulfate
7779–86–4 7779–88–6	Zinc hydrosulfite Zinc nitrate	10045-94-0 10049-04-4	Mercuric nitrate Chlorine dioxide
7779-88-8 7782-41-4	Fluorine	10049-05-5	Chromous chloride
7782-49-2	Selenium	10049-03-3	Lead nitrate
7782-50-5	Chlorine	10101-53-8	Chromic sulfate
7783-00-8	Selenious acid	10101-63-0	Lead iodide
7783-06-4	Hydrogen sulfide	10102-18-8	Sodium selenite
7783-07-5	Hydrogen selenide	10102-20-2	Sodium tellurite
7783-18-8	Ammonium thiosulfate	10102–43–9 10102–43–9	Nitric oxide
7783–20–2 7783–35–9	Ammonium sulfate (solution) Mercuric sulfate	10102-43-9	Nitrogen oxide Nitrogen dioxide
7783–46–2	Lead fluoride	10102-44-0	Nitric acid, thallium(1+) salt
7783-47-3	Stannous fluoride	10102-45-1	Thallium(I) nitrate
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CAS Number	Name	CAS Number	Name
10102-48-4	Lead arsenate	14639–98–6	72'
10103-61-4	Copper arsenate	14644-61-2	Zirconium sulfate
10108-64-2	Cadmium chloride	15271–41–7	Bicyclo[2.2.1]heptane-2-carbonitrile, 5-chloro-
10124-50-2	Potassium arsenite	15699-18-0	6-((((methyla Nickel ammonium sulfate
10140-87-1	Ethanol, 1,2-dichloro-, acetate	15950-66-0	
10192-30-0	Ammonium bisulfite	15972-60-8	2,3,4–Trichlorophenol Alachlor
10196-04-0	Ammonium sulfite	16071-86-6	C.I. Direct Brown 95
10210-68-1 10265-92-6	Cobalt carbonyl	16543-55-8	N-Nitrosonornicotine
10203-92-0	Methamidophos Boron trichloride	16721-80-5	Sodium hydrosulfide
10294-34-3	Dialifor	16752-77-5	Methomyl
10311-84-9		16871-71-9	Zinc silicofluoride
10380-29-7	Cupric sulfate, ammoniated Mercurous nitrate	16919–19–0	Ammonium silicofluoride
10413-73-3	Ferric nitrate	16923-95-8	Zirconium potassium fluoride
10421-46-4	Methacrolein diacetate	17702-41-9	Decaborane(14)
10544-72-6	Nitrogen oxide NO2	17702-57-7	Formparanate
10588-01-9	Sodium bichromate	17804-35-2	Benomyl
11096-82-5	Aroclor 1260	18883-66-4	Streptozotocin
11096-82-5	Polychlorinated biphenyls (PCBs)	19287-45-7	Diborane
11090-62-3	Aroclor 1254	19525-15-6	Uranium peroxide
11097-69-1	Polychlorinated biphenyls (PCBs)	19624–22–7	Pentaborane
11104-28-2	Aroclor 1221	20816-12-0	Osmium oxide (T-4)-
11104-28-2	Polychlorinated biphenyls (PCBs)	20816-12-0	Osmium tetroxide
11141–16–5	Aroclor 1232	20830-75-5	Digoxin
11141–16–5	Polychlorinated biphenyls (PCBs)	20830-81-3	Daunomycin
12002-03-8	Cupric acetoarsenite	20859-73-8	Aluminum phosphide
12002-03-8	Paris green	21548-32-3	Fosthietan
12036-02-1	Osmium oxide	21609-90-5	Leptophos
12039-52-0	Selenious acid, dithallium(1+) salt	21725-46-2	Cyanazine
12039-52-0	Thallium(I) selenide	21908-53-2	Mercuric oxide
12039-52-0	Thallium selenite	21923-23-9	Chlorthiophos
12054-48-7	Nickel hydroxide	22224-92-6	Fenamiphos
12108-13-3	Manganese, tricarbonyl methylcyclopentadienyl	22781-23-3	Bendiocarb (conc. above 15%)
12122-67-7	Zineb	23103-98-2	Pirimicarb (conc. above 15%)
12125-01-8	Ammonium fluoride	23135-22-0	Oxamyl
12125-02-9	Ammonium chloride	23422-53-9	Formetanate hydrochloride
12135-76-1	Ammonium sulfide	23505-41-1	Pirimifos-ethyl
12427-38-2	Maneb	23950-58-5	3,5-Dichloro-N (1,1-dimethyl-2-propynyl) ben-
12672-29-6	Aroclor 1248		zamide
12672-29-6	Polychlorinated biphenyls (PCBs)	23950-58-5	Pronamide
12674-11-2	Aroclor 1016	24017-47-8	Triazofos
12674-11-2	Polychlorinated biphenyls (PCBs)	24934-91-6	Chlormaphos
12771-08-3	Sulfur monochloride	25154-54-5	Dinitrobenzene (mixed isomers)
13071-79-9	Terbufos	25154-55-6	Nitrophenol (mixed isomers)
13121-70-5	Cyhexatin	25155-30-0	Sodium dodecylbenzenesulfonate
13171–21–6	Phosphamidon	25167-82-2	Trichlorophenol
13194-48-4	Ethoprophos	25168-15-4	2,4,5–T esters
13410-01-0	Sodium selenate	25168-26-7	2,4–D Esters
13450-90-3	Gallium trichloride	25168-26-7	2,4–D isooctyl ester (conc. above 20%)
13463-39-3	Nickel carbonyl	25321–14–6	Dinitrotoluene
13463-39-3	Nickel tetracarbonyl	25321-22-6	Dichlorobenzene
13463-40-6	Iron, pentacarbonyl-	25321-22-6	Dichlorobenzene (mixed isomers)
13494-80-9	Tellurium	25323-30-2	Dichloroethylenes (mixture)
13560-99-1	2,4,5–T salts	25376-45-8	Benzenediamine, ar-methyl-
13597-99-4	Beryllium nitrate	25376-45-8	Diaminotoluene (mixed isomers)
13746–89–9	Zirconium nitrate	25376-45-8	Toluenediamine
13765-19-0	Calcium chromate	25550-58-7	Dinitrophenol
13765–19–0	Chromic acid, calcium salt	26264-06-2	Calcium dodecylbenzene sulfonate
13814–96–5	Lead fluoborate	26419–73–8	Carbamic acid, methyl-, O-(((2,4-dimethyl-1,
13826-83-0	Ammonium fluoborate		3-dithiolan-2-y
13952-84-6	sec-Butylamine	26628-22-8	Sodium azide
14017-41-5	Cobaltous sulfamate	26638-19-7	Dichloropropane
14167–18–1	Salcomine	26952-23-8	Dichloropropene(s)
14216-75-2	Nickel nitrate	27137-85-5	Trichloro(dichlorophenyl)silane
14307–35–8	Lithium chromate	27176-87-0	Dodecylbenzenesulfonic acid
14639–97–5	Zinc ammonium chloride	27323–41–7	Triethanolamine dodecylbenzene sulfonate

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CAS Number	Name
27774–13–6	Vanadyl sulfate
28300-74-5	Antimony potassium tartrate
28347-13-9	Xylylene dichloride
28772-56-7	Bromadiolone
30525-89-4	Paraformaldehyde
30674-80-7	Methacryloyloxyethyl isocyanate
32534-95-5	2,4,5-TP esters
32976-88-8	2,4–Dithiobiuret
33089-61-1	Amitraz
33213-65-9	beta-Endosulfan
36478-76-9	Uranyl nitrate
39156-41-7	2,4–Diaminoanisole sulfate
39196–18–4	2-Butanone, 3,3-dimethyl-1-(methylthio)-,
	O-[methylamino) carbonyl] oxime
39196–18–4	3,3-Dimethyl-1-(methylthio-2-butanone,
	O-[(methylamino) carbonyl] oxime
39196-18-4	Thiofanox
39300-45-3	Dinocap
42504-46-1	Isopropanolamine dodecylbenzene sulfonate
42874-03-3	Oxyfluorfen
50782-69-9	Phosphonothioic acid, methyl-, S-(2-(bis(1-
	methylethyl) amino
52628-25-8	Zinc ammonium chloride
52652-59-2	Lead stearate
52740–16–6	Calcium arsenite
53467-11-1	2,4–D Esters
53469-21-9	Aroclor 1242
53469-21-9	Polychlorinated biphenyls (PCBs)
53558-25-1	Pyriminil
55488-87-4	Ferric ammonium oxalate
56073-10-0	Brodifacoum (conc. above 0.005%)
56189-09-4	Lead stearate
58270-08-9	Zinc, dichloro(4,4-dimethyl-5((((methylamino- carbonyl)oxy)im
61792-07-2	2,4,5–T esters
62207–76–5	Cobalt, ((2,2'-(1,2-ethanediylbis (nitrilomethylidyne))bis(6-

APPENDIX B

FINANCIAL FORMS

B.1 Letter from chief financial officer:

To support a financial test of self-insurance or a guarantee, the chief financial officer of the major facility or guarantor shall prepare and sign a letter worded exactly as follows, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted.

LETTER FROM CHIEF FINANCIAL OFFICER

I am the chief financial officer of [name and address of the owner or operator, or guarantor]. This letter is in support of the use of ["the financial test of self-insurance" and/or "guarantee"] to demonstrate financial responsibility for taking corrective action caused by discharges in the amount of at least [dollar amount] per occurrence and [dollar amount] annual aggregate.

A ["financial test" and/or "guarantee"] is also used by this ["owner or operator" or "guarantor"] to demonstrate evidence of financial responsibility in the following amounts under the following EPA or State rules or regulations (i.e. RCRA, ECRA, UST, etc.):

[applicable rules or regulations and amounts]

This ["owner or operator" or "guarantor"] has not received an adverse opinion, a disclaimer of opinion, or a "going concern" qualification from an independent auditor on his or her financial statements for the latest completed fiscal year.

[Fill in the information for Alternative I if the criteria of N.J.A.C. 7:1E-4.5(g)1 based on tangible net worth are being used to demonstrate compliance with the financial test requirements. Fill in the information for Alternative II if the criteria based on bond rating of N.J.A.C. 7:1E-4.5(g)2 are being used to demonstrate compliance with the financial test requirements.]

ALTERNATIVE I 1. Amount of annual DCR aggregate coverage being assured by a financial test and/or guarantee 2. Amount of annual aggregate coverage for all other federal or State regulatory costs (i.e. RCRA, ECRA, UST, etc.) covered by a financial test, and/or guarantee 3. Sum of lines 1 and 2 4. Total tangible assets 5. Total liabilities [if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6] 6. Tangible net worth [subtract line 5 from line 4] NO YES 7. Is line 6 at least \$10 million? 8. Is line 6 at least 10 times line 3? YES NO 9. Have financial statements for the latest fiscal year been filed with the Securities Exchange Commission? 10. Have financial statements for the latest fiscal year been filed with the Energy Information Administration? 11. Have financial statements for the latest fiscal year been filed with the Rural Electrification Administration? 12. Has financial information been provided to Dun and Bradstreet, and has Dun and Bradstreet provided a financial strength rating of 4A or 5A? [Answer "Yes" only if both criteria have been met] ALTERNATIVE II 1. Amount of annual DCR aggregate coverage being assured by a financial test and/or guarantee 2. Amount of annual aggregate coverage for all other federal or State regulatory cost (i.e. RCRA, ECRA, UST, etc.) covered by a financial test, and/or guarantee

3. Sum of lines 1 and 2	\$	
4. Total tangible assets	\$	
5. Total liabilities [if any of the amount re-		
ported on line 3 is included in total liabili- ties, you may deduct that amount from		
this line and add that amount to line 6]	\$	
6. Tangible net worth [subtract line 5 from		
line 4]	\$	
7. Total assets in the U.S. [required only if		
less than 90 percent of assets are located	•	~
in the U.S.]	\$	
	YES	NO
8. Is line 6 at least \$10 million?		
9. Is line 6 at least 6 times line 3?		
	YES	NO
10. Are at least 90 percent of total assets		
located in the U.S.? [If "No", complete		
line 11.]		
11. Is line 7 at least 6 times line 3?		
[Fill in either lines 12–15 or lines 16–18:]	¢	
12. Current assets 13. Current liabilities	\$	
14. Net working capital [subtract line 13 from	Ψ	
line 12]	\$	
* :	YES	NO
15. Is line 14 at least 6 times line 3?	120	210
16. Current bond rating of most recent bond		
issue		
17. Name of rating service		
18. Date of maturity of bond		
19. Have financial statements for the latest		
fiscal year been filed with the SEC, the		
Energy Information Administration, or the Rural Electrification Administration?		
[If "No", please attach a report from an		
independent certified public accountant certify-		
ing that there are no material differences be-		
tween the data as reported in lines 4-18 above		
and the financial statements for the latest fiscal		
year.]		
[For both Alternative I and Alternative II complete the certification with this statement.]		
I hereby certify that the wording of this letter	is ident	ical to
the wording specified in Appendix B of N.J.A.C.	7:1E, a	s such

B.2 Guarantee:

[Signature]

[Name]

[Title]

[Date]

The guarantee must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

rules were constituted on the date shown immediately below.

GUARANTEE

Guarantee made this [date] by [name of guaranteeing entity], a business entity organized under the laws of the State of New Jersey, herein referred to as guarantor, to the Department and to any and all third parties, and obligees, on behalf of [owner or operator] of [business address].

- (1) Guarantor meets or exceeds the financial test criteria of N.J.A.C. 7:1E-4.5(g) and agrees to comply with the requirements for guarantors as specified in N.J.A.C. 7:1E-4.5(h).
- (2) This guarantee satisfies the requirements for assuring funding in the amount of [dollar amount] per occurrence and [dollar amount] annual aggregate for taking corrective action caused by discharges arising from operating the above identified major facility.
- (3) [Insert appropriate phrase: "On behalf of our subsidiary" (if guarantor is corporate parent of the owner or operator); "On behalf of our affiliate" (if guarantor is a related firm of the owner or substantial business relationship with owner or operator); or "Incident to our business relationship with" (if guarantor is providing the guarantee as an incident to a substantial business relationship with owner or operator)] [owner or operator], guarantor guarantees to the Department and to any and all third parties that:

In the event that [owner or operator] fails to provide alternate coverage within 60 days after receipt of a notice of cancellation of this guarantee and the Department has determined or suspects that a discharge has occurred at a facility covered by this guarantee, the guarantor, upon instructions from the Department, shall fund a standby trust fund in an amount sufficient to cover cleanup and removal costs, but not to exceed the coverage limits specified in N.J.A.C. 7:1E-4.5(b).

In the event that the Department determines that [owner or operator] has failed to perform corrective action for discharges arising out of the operation of the above-identified facility, the guarantor, upon written instructions from the Department, shall fund a standby trust in an amount sufficient to cover cleanup and removal costs, but not to exceed the coverage limits specified above.

- (4) Guarantor agrees that if, at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet the financial test criteria of N.J.A.C. 7:1E-4.5(g), guarantor shall send within 120 days of such failure, by certified mail, notice to [owner or operator] and the Department. The guarantee will terminate 120 days from the date of receipt of the notice by [owner or operator] or 120 days from the date of receipt of the notice by the Department, whichever is later, as evidenced by the return receipt.
- (5) Guarantor agrees to notify [owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.
- (6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alternation of any obligation of [owner or operator] pursuant to N.J.A.C. 7:1E.

- (7) Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable financial responsibility requirements of N.J.A.C. 7:1E-4.5 for the above-identified facility, except that guarantor may cancel this guarantee by sending notice by certified mail to [owner or operator] and the Department, such cancellation to become effective no earlier than 120 days after receipt of such notice by [owner or operator], as evidenced by the return receipt.
- (8) The guarantor's obligation does not apply to any of the following:
- (a) Any obligation of [owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
- (b) Bodily injury to an employee of [owner or operator] arising from, and in the course of, employment by [owner or operator];
- (c) Bodily injury or property damage not related to a discharge arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft:
- (d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [owner or operator] that is not the direct result of a discharge from the facility;
- (e) Bodily damage or property damage for which [owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of N.J.A.C. 7:1E-4.5.
- (9) Guarantor expressly waives notice of acceptance of this guarantee by the Department or by [owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in Appendix B of N.J.A.C. 7:1E as such rules were constituted on the effective date shown immediately below.

Effective date:
[Name of guarantor] [Authorized signature for guarantor] [Name of person signing] [Title of person signing]
Signature of witness or notary:

B.3 Insurance or risk retention group:

Each insurance policy must be amended by an endorsement worded as specified in paragraph (1) or evidenced by a certificate of insurance worded as specified in paragraph (2), except that instructions in brackets must be replaced with the relevant information and the brackets deleted:

(1)		ENDORSEMENT		
	NAME:	[name of each covered location]		
	ADDRESS:	[address of each covered location]		
	POLICY NUMBER:			
	PERIOD OF COVERAGE:	[current policy period]		
	NAME OF [INSURER OR RISK RETENTION GROUP]:			
	ADDRESS OF [INSURER OR RISK RETENTION GROUP]: NAME OF INSURED:			
	ADDRESS OF INSU	RED:		

Endorsement:

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering the following facility: [name and address of the facility] for taking corrective action caused by discharges.

The limits of liability are [insert the dollar amount of the "per occurrence" and "annual aggregate" limits of the Insurer's or Group's liability], exclusive of legal defense costs. This coverage is provided under [policy number]. The effective date of said policy is [date].

- 2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):
- a. Bankruptcy or insolvency of the insured shall not relieve the ["Insurer" or "Group"] of its obligations under the policy to which this endorsement is attached.
- b. The ["Insurer" or "Group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action, with a right of reimbursement by the insured for any such payment made by the ["Insurer" or "Group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms.
- c. Whenever requested by the Department, ["Insurer" or "Group"] agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the ["Insurer" or "Group"] will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured or 60 days after a copy of such written notice is received by the Department, whichever is later.

[Insert for claims-made policies:

e. The insurance covers claims for any occurrence that commenced during the term of the policy that is discovered and reported to the ["Insurer" or "Group"] within six months of the effective date of the cancellation or termination of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in Appendix B of N.J.A.C. 7:1E and that the ["Insurer" or "Group"] is ["licensed to transact the business of insurance" or "eligible to provide insurance as an excess or surplus lines insurer in New Jersey".]

[Signature of authorized representative of Insurer or Risk Retention Group]

[Name of person signing]

[Title of person signing], Authorized Representative of [name of Insurer or Risk Retention Group]

[Address of Representative]

(2)		CERTIFICATE OF INSURANCE					
	NAME:	[name of each covered location]					
	ADDRESS:	[address of each covered location]					
	POLICY NUMBER:	·					
	ENDORSEMENT (if applicable):						
	PERIOD OF COVERAGE:	[current policy period]					
	R OR RISK RETENTION						
ADDRESS OF [INSURER OR RISK RETENTION GROUP]: NAME OF INSURED:							
						ADDRESS OF INSU	JRED:
					Cei	rtification:	

1. [Name of Insurer or Risk Retention Group], [the "Insurer" or "Group"], as identified above, hereby certifies that it has issued liability insurance covering the following facility: [List the name and address of the facility] for taking corrective action caused by discharges arising from operating the facility identified above.

The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's or Group's liability], exclusive of legal defense costs. This coverage is provided under [policy number]. The effective date of said policy is [date].

- 2. The ["Insurer" or "Group"] further certifies the following with respect to the insurance described in Paragraph 1:
- a. Bankruptcy or insolvency of the insured shall not relieve the ["Insurer" or "Group"] of its obligations under the policy to which this certificate applies.
- b. The ["Insurer" or "Group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action, with a right of reimbursement by the insured for any such payment made by the ["Insurer" or "Group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms.
- c. Whenever requested by the Department, the ["Insurer" or "Group"] agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.
- d. Cancellation or any other termination of the insurance by the ["Insurer" or "Group"] will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured or 60 days after a copy of such written notice is received by the Department, whichever is later.

[Insert for claims-made policies:

e. The insurance covers claims for any occurrence that commenced during the term of the policy that is discovered and reported to the ["Insurer" or "Group"] within six months of the effective date of the cancellation or other termination of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in Appendix B of N.J.A.C. 7:1E and that the ["Insurer" or "Group"] is ["licensed to transact the business of insurance" or "eligible to provide insurance as an excess or surplus lines insurer in the State"].

[Signature of authorized representative of Insurer]

[Type name]

[Title], Authorized Representative of [name Insurer or Risk Retention Group]

[Address of Representative]

B.4 Surety Bond:

The surety bond must be worded as follows, except that instructions in brackets must be replaced with the relevant information and the brackets deleted:

PERFORMANCE BOND

DATE BOND **EXECUTED:** PERIOD OF COVERAGE: PRINCIPAL: [legal name and business address of owner or operator] TYPE OF [insert "individual," "joint venture," ORGANIZATION: "partnership," or "corporation"] STATE OF INCORPORATION (If Applicable): [name(s) and business address(es)] SURETY(IES): SCOPE OF COVERAGE: [List the name and address of the facility. List the coverage guaranteed by the bond: taking corrective action caused by discharges.] PENAL SUMS OF BOND: Per occurrence Annual aggregate

Know all Persons by These Presents, that we, the Principal and Surety(ies), hereto are firmly bound to the Department, in the above penal sums for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we the Sureties, bind ourselves in such sums jointly and severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sums only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sums.

SURETY'S BOND NUMBER: _

Whereas said Principal is required under N.J.S.A. 58:10–23.11 to provide financial assurance for taking corrective action caused by discharges arising from operating the facility identified above, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, the conditions of the obligation are such that if the Principal shall faithfully take corrective action caused by discharges arising from operating the facility identified above, or if the Principal shall provide alternate financial assurance within 120 days after the date the notice of cancellation is received by the Principal from the Surety(ies), then this obligation shall be null and void; otherwise, it is to remain in full force and effect.

Such obligation does not apply to any of the following:

- (a) Any obligation of [owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
- (b) Bodily injury to an employee of [owner or operator] arising from, and in the course of, employment by [owner or operator];
- (c) Bodily injury or property damage not related to a discharge arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft:
- (d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [owner or operator] that is not the direct result of a discharge from the facility;
- (e) Bodily injury or property damage for which [owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of N.J.A.C. 7:1E-4.5.

Upon notification by the Department that the Principal has failed to take corrective action in accordance with the Department's instructions, as guaranteed by this bond, the Surety(ies) shall either perform corrective action in accordance with the Department's instructions, or place funds in an amount up to the annual aggregate penal sum into the standby trust fund as directed by the Department.

Upon notification by the Department that the Principal has failed to provide alternate financial assurance within 60 days after the date the notice of cancellation is received by the Principal from the Surety(ies) and that the Department has determined or suspects that a discharge has occurred, the Surety(ies) shall place funds in an amount not exceeding the annual aggregate penal sum into the standby trust fund as directed by the Department.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the annual aggregate to the penal sum shown on the face of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the Department, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal or the date of receipt of the notice of cancellation by the Department, whichever is later, as evidenced by the return receipt.

The Principal may terminate this bond by sending written notice to the Surety(ies).

In Witness Thereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in Appendix B of N.J.A.C. 7:1E as such rules were constituted on the date this bond was executed.

PRINCIPAL

[Signature(s)]
[Name(s)]
[Title(s)]
[Corporate seal]

CORPORATE SURETY(IES)

[Name and address]	 	
State of Incorporation:		
Liability limit:	\$	
[Signature(s)]	3	
[Name(s) and title(s)]		
[Corporate seal]		

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium:	\$

B.5 Letter of Credit:

The letter of credit must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

IRREVOCABLE STANDBY LETTER OF CREDIT

[Name and address of issuing institution]

[Name and address of the Department]

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No.______in your favor, at the request and for the account of [owner or operator name] of [address] up to the aggregate amount of [in words] U.S. dollars (\$[dollar amount]), available upon presentation of:

- (1) your sight draft, bearing reference to this letter of credit, No.______, and
- (2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to rules issued under authority of the Spill Compensation and Control Act, and that this letter of credit is not being drawn on to cover any of the following:
- (a) Any obligation of [owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
- (b) Bodily injury to an employee of [owner or operator] arising from, and in the course of, employment by [owner or operator];
- (c) Bodily injury or property damage not related to a discharge arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;
- (d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [owner or operator] that is not the direct result of a discharge from the facility;
- (e) Bodily injury or property damage for which [owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of N.J.A.C. 7:1E-4.5."

This letter of credit may be drawn on to cover taking corrective action caused by discharges arising from operating the facility identified below in the amount of [in words] \$[dollar amount] per occurrence and [in words] \$[dollar amount] annual aggregate.

This letter of credit is effective as of [date] and shall expire on [date], but such expiration date shall be automatically extended for a period of [at least the length of the original term] on [expiration date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify [owner or operator] and the Department by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event that [owner or operator] is so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by [owner or operator] or for 120 days after the date of receipt by the Department, as shown on the signed return receipt.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner or operator] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in Appendix B of N.J.A.C. 7:1E, as such rules were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to ["the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"].

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