


Environmental Compliance Digest

A Handbook for New Jersey Employers

New Jersey Environmental Compliance Digest

**NEW JERSEY BUSINESS &
INDUSTRY ASSOCIATION
(NJBIA)**

Revised November 2006

THIS DIGEST IS PRODUCED AND DISTRIBUTED BY THE NJBIA ENVIRONMENTAL QUALITY COMMITTEE UNDER THE LEADERSHIP OF JOHN KINKELA, LENOX CHINA, DAVID BROGAN, NJBIA, AND SARA BLUHM, NJBIA.

IT WOULD NOT HAVE BEEN POSSIBLE WITHOUT THE HARD WORK AND DEDICATION OF THE FOLLOWING PEOPLE:

Editors and Contributors

Jan Baldauf, Cardinal Health Care Systems
Sara Bluhm, New Jersey Business & Industry Association
David Brogan, New Jersey Business & Industry Association
Toby Hanna, ERM
Edward A. Hogan, Esq., Norris, McLaughlin & Marcus, PA
Kenneth Kraly, L'Oreal
David O. Livingston
Charles McCarty
Patrick T. Mottola, Esq., Norris, McLaughlin & Marcus, PA
Stephen W. Smithson, Esq., Lowenstein Sandler, PC
Dr. Jim Sinclair

A special thank you to the Department of Environmental Protection (DEP) under the direction of Commissioner Lisa Jackson. The Department staff, across the various program areas, reviewed this digest and assisted in the update.

FOR ADDITIONAL INFORMATION OR FOR UPDATES, PLEASE VISIT WWW.NJBIA.ORG.

The New Jersey Business & Industry Association is the nation's largest state-level employer association, with over 23,000 member companies. NJBIA is the premier government affairs organization in Trenton, representing the business community before the State Legislature and State agencies. Call NJBIA's Member Services Department at 609-393-7707, ext. 238, for more information.

Disclaimer

The reader is cautioned that this Digest is only a guide and is not intended to provide legal advice. Consultation with an attorney versed in environmental law is recommended when confronted with environmental legal issues.

Revised November 2006

TABLE OF CONTENTS

Section	Page
I. INTRODUCTION	1
<i>Overview</i>	1
<i>Industry Classification</i>	1
<i>Disclaimer</i>	1
II. CHEMICALS	2
1. Federal Spill Prevention Control and Countermeasure Plans (SPCC).....	2
(a) <i>Summary of Program and Applicability</i>	2
(b) <i>SPCC Plan Requirements</i>	3
(i) <i>Facility Drainage</i>	4
(ii) <i>Secondary Containment/Diversionary Structures</i>	4
(iii) <i>Transfer Operations</i>	4
(iv) <i>Tank Car and Tank Truck Loading/Unloading</i>	4
(v) <i>Inspections/Recordkeeping</i>	5
(vi) <i>Security</i>	5
(vii) <i>Training and Spill Prevention Procedures</i>	5
2. NJ Discharge Prevention, Containment and Countermeasure (DPCC).....	5
(a) <i>Overview of Program</i>	5
(b) <i>Applicability</i>	5
(c) <i>Required Submissions</i>	6
(d) <i>DPCC Plan Requirements</i>	6
(e) <i>DCR Plan Requirements</i>	8
(f) <i>Certifications</i>	8
3. Underground Storage Tanks (UST).....	9
<i>Summary of Regulations (N.J.A.C. 7:14B)</i>	9
<i>Registration</i>	10
<i>Compliance</i>	10
<i>New Tank Systems</i>	10
<i>Upgraded Tank Systems</i>	11
<i>All Tank Systems</i>	11
<i>Spill and Overfill Prevention</i>	11
<i>Corrosion Protection</i>	12
<i>Release Response</i>	12
<i>Recordkeeping Requirements</i>	12
<i>Financial Responsibility</i>	12
<i>Suspected Releases</i>	13
<i>Confirmed Releases</i>	13
<i>Out of Service Tanks</i>	13
<i>Permanent Closure of Tanks</i>	13
4. Toxic Catastrophe Prevention Act Program (TCPA)	14
<i>Applicability (N.J.A.C. 7:31)</i>	14
5. Toxic Substances Control Act (TSCA)	15
<i>Summary of Regulations (40 CFR Parts 700 through 766)</i>	15
6. Community Right-To-Know	17
<i>State Requirements</i>	17
N.J. State Community Right to Know Surveys	17
<i>Basic Information Required</i>	17
Federal TRI Annual Reporting	18
N.J. Release and Pollution Prevention Report.....	18
7. N.J. Right to Know Labeling Requirements.....	19
<i>Federal Applicability</i>	20
Unplanned Releases.....	20
8. Pesticide Control Code (N.J.A.C. 7:30)	21

III. WASTE	23
1. Sanitary and Solid Waste.....	23
(a) <i>Summary of Regulations (N.J.A.C. 7:26)</i>	23
(b) <i>Solid Waste Types/Definitions</i>	23
(c) <i>Liquid Waste Types</i>	25
(d) <i>Hauling Alternatives</i>	25
(e) <i>Recycling</i>	25
(f) <i>Special/Secured Landfills</i>	26
2. Hazardous Waste	26
(a) <i>Summary of Regulations (40 CFR 260 - 270; N.J.A.C. 7:26G)</i>	26
(b) <i>Applicability</i>	26
(c) <i>The main types of listed hazardous waste</i>	27
(d) <i>A waste is hazardous if it exhibits the following characteristics</i>	27
(e) <i>Storage Rules:</i>	28
(f) <i>Major Regulatory Requirements</i>	28
3. Universal Waste.....	29
4. Regulated Medical Waste.....	30
IV. WATER.....	32
1. Regulatory Overview.....	32
2. Water Quality	32
(a) <i>New Jersey Pollutant Discharge Elimination System (N.J.A.C 7:14A)</i>	32
(i) <i>Discharge to Surface Water Permits</i>	32
(ii) <i>Discharge to Groundwater Permits</i>	33
(iii) <i>Stormwater Permits</i>	34
(b) <i>Pretreatment Program</i>	36
(i) <i>Requirements for Indirect Users</i>	37
(ii) <i>Requirements for Significant Indirect Users</i>	38
(c) <i>Treatment Works Approvals (TWA)</i>	39
3. Water Supply Program	42
(a) <i>Water Allocation (N.J.A.C. 7:19)</i>	42
(b) <i>Well Drilling (N.J.A.C. 7:9D)</i>	42
(c) <i>Safe Drinking Water</i>	43
V. AIR	44
1. New Jersey Air Permitting (N.J.A.C. 7:27).....	44
(a) <i>Objectives for Permitting</i>	44
(b) <i>Types of Air Permits</i>	44
(c) <i>Potential to Emit (PTE)</i>	44
(d) <i>Major Source PTE Thresholds - Subchapter 22 – Title V Operating Permits</i>	45
(e) <i>Minor Source Thresholds- Facilities Subject to Subchapter 8</i>	45
(f) <i>Some of the Sources Subject to Subchapter 8 Air Permitting Requirements (N.J.A.C. 7:27-8.2 (c))</i> ..	45
(g) <i>Exemptions to Subchapter 8 Air Permitting Requirements (N.J.A.C 7:27-8.2 (d)).</i>	47
(h) <i>General Permits Currently Available- (N.J.A.C. 7:27-8.8)</i>	48
2. Clean Air Act and Title V Permitting	49
(a) <i>Regulatory Background and Applicability</i>	49
(b) <i>Title V Application/Permit Content</i>	50
(c) <i>Title V Permit Compliance</i>	50
3. Other NJ Permitting Requirements.....	51
(i) <i>Subchapter 16: Control of VOC</i>	51
(ii) <i>Subchapter 16 Requirements</i>	52
(iii) <i>Subchapter 18: Emission Offset Rule</i>	52
(iv) <i>Subchapter 19: Control of NOx</i>	53
(v) <i>Subchapter 21 - Emission Statements -PTE Thresholds</i>	53
(vi) <i>State-of-the-Art (SOTA) Triggers [N.J.A.C. 7:27-8.12]</i>	53
(vii) <i>SOTA Requirements</i>	54

(viii) SOTA Manual List	54
VI. NJ SITE REMEDIATION PROGRAM	55
1. New Jersey Spill Compensation and Control Act.....	55
2. Industrial Site Recovery Act.....	55
NAICS Code	56
Use of Hazardous Substances	56
ISRA Triggers	57
ISRA Administrative Process	57
Negative Declaration Affidavit.....	57
ISRA Substantive Process	58
Landlord and Tenant	58
3. Voluntary Cleanup Program	59
4. Technical Regulations	59
5. Enforcement	59
VII. GENERAL LAND USE PROGRAMS	60
1. Introduction	60
2. Freshwater Wetlands	60
3. Tidal Wetlands	61
4. Waterfront Development Act	62
5. Flood Hazard Area Control Act (Stream Encroachment).....	62
5. Dam Safety	63
VIII. AREA-SPECIFIC LAND USE PROGRAMS	64
1. Coastal Area Facility Review Act (CAFRA)	64
2. New Jersey Meadowlands Commission	65
3. Pinelands Comprehensive Management Plan.....	65
4. Delaware River Basin Commission (DRBC)	66
5. Delaware and Raritan Canal Commission	66
6. Highlands.....	67
IX. NOISE	68
<i>Regulations at N.J.A.C. 7:29</i>	68
X. RADIATION	69
1. Radioactive Materials	69
2. Machine Source Radiation.....	69
3. Non-Ionizing Radiation	70
4. Radon Testing and Mitigations.....	70
XI. HISTORIC PROPERTY	71
The New Jersey Register of Historic Places Act – Regulations at N.J.A.C. 7.4	71
Section 106 of the National Historic Preservation Act.....	72
Other Historic Property Reviews.....	72
Technical Assistance	73
APPENDIX A (Acronyms).....	I
APPENDIX B (Web sites).....	IV
APPENDIX C (Bibliography)	VII

I. INTRODUCTION

Overview

This Digest has been prepared as an overview of the essential elements of environmental compliance for New Jersey businesses. Environmental laws and regulations can be perceived as confusing, inconsistent, and at times, irrational. This is because these environmental programs are not the product of a single statute but rather, have evolved from numerous enactments of federal, state, county, and municipal legislative bodies over the past 35 years. Many enactments are in response to perceived problems. Others were built upon pre-existing programs. Some attempted to harmonize provisions with those of other levels of government, and others did not. While this overview is far from comprehensive, it is our hope that it will at least orient the reader to the steps necessary to achieve compliance.

Throughout the text are references to Web sites providing additional information. The reader's attention is also directed to the bibliography, which provides reference to considerably more in-depth treatises on the different subjects.

Industry Classification

Because many regulatory programs described in this Digest depend on an industry's classification, it is worth noting the primary system used by the New Jersey Department of Environmental Protection (NJDEP). In 2003, the NJDEP was directed to replace the old Standard Industrial Classification ("SIC") coding system with the North American Industry Classification System ("NAICS"). However, some program areas still use the SIC coding system. This Digest references both the SIC and NAICS classifications where appropriate. The SIC coding system is divided into a number of two-digit Major Groups and further subdivided into four-digit Industry Numbers. The NAICS system utilizes a five or six-digit numbering system. Information on this system is available online at <http://www.naics.com>

Disclaimer

The reader is cautioned that this Digest is only a guide and is not intended to provide legal advice. Consultation with an attorney versed in environmental law is recommended when confronted with environmental legal issues.

II. CHEMICALS

1. Federal Spill Prevention Control and Countermeasure Plans (SPCC)

(a) Summary of Program and Applicability

This is a Federal EPA Program administered by the NJDEP (40 CFR §112). The objective of Federal Oil Pollution Prevention regulation is to prevent the discharge of oil into or upon navigable waters of the United States. These regulations contain two requirements: (1) the Spill Prevention Control and Countermeasure (SPCC) Plan rule and (2) the Facility Response Plan (FRP) rule.

NOTE: You can combine SPCC/FRP and DPCC/DCR Plans (see 2. below) if you are required to have both. Check <http://www.nj.gov/dep/rpp/brp/download.htm>

Owners and operators of non-transportation related facilities are required to prepare a SPCC Plan if the facility has:

- a total underground buried storage capacity of more than 42,000 gallons of oil; or,
- a total aboveground oil storage capacity of more than 1,320 gallons of oil; and,
- could reasonably be expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines.

(NOTE: Almost all facilities in NJ are considered to have a reasonable potential to discharge to navigable waters).

To determine applicability, the following factors should be carefully considered:

- Mineral oil and vegetable oils are considered oils.
- The on-site storage of oil-filled electrical equipment (e.g., transformers) is subject to the SPCC requirements.
- The storage of oil in portable or mobile tanks, including vehicles containing product, is subject to the SPCC requirements.
- Navigable waters are broadly interpreted to include intermittently dry creeks, wetlands, small streams, ponds, and tributaries to rivers and lakes.

Preparation of a FRP is required for facilities that:

- transfer oil over water to or from vessels and have a total oil storage capacity greater than or equal to 42,000 gallons; or,
- have a total oil storage capacity greater than or equal to 1 million gallons and lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area; or,
- have a total oil storage capacity greater than or equal to 1 million gallons and are located at a distance such that a discharge from the facility could cause injury to fish, wildlife and sensitive environments; or,
- have a total oil storage capacity greater than or equal to 1 million gallons and the facility is located at a distance (as calculated using the appropriate formula in Attachment C-III, Appendix C, 40 CFR 112 or comparable formula) such that a discharge from the facility would shut down a public drinking water intake; or,
- have a total oil storage capacity greater than or equal to 1 million gallons and have experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years.

Check this EPA Web site for more information:

<http://www.epa.gov/oilspill/frps/index.htm>

(b) SPCC Plan Requirements

Each SPCC Plan must be unique to the facility and prepared using good engineering practices. There is no requirement to submit the SPCC Plan to the regulatory body; however, the SPCC must be maintained on-site, certified by a licensed NJ Professional Engineer, and approved by a person with the authority to commit the resources necessary to fully implement the plan.

The SPCC Plan must be reviewed at least once every three years. The SPCC Plan must be amended within six months of the review to include more effective prevention and control technology if such technology will significantly reduce the likelihood of a spill event from the facility, and if such technology has been field-proven at the time of review. After a change in a facility's design, construction, operation, or maintenance occurs which affects the facility's potential for discharge of oil to navigable waters, the SPCC Plan must be amended within six months and certified by a licensed NJ Professional Engineer.

In general, the SPCC Plan should include the following information:

- Written descriptions of any spills occurring within the past 12 months.
- A prediction of the direction, rate of flow and total quantity of oil that could be discharged.
- A description of containment and/or diversionary structures or equipment to prevent a discharge of oil from reaching navigable waters.
- A discussion of spill prevention and control measures.

Spill prevention and control measures at a minimum should address the following:

(i) Facility Drainage

Facilities must implement a drainage control strategy that is consistent with good engineering practices, based on the size and complexity of their operation. Whatever strategy is employed should be adequately engineered to prevent oil from reaching navigable waters in the event of equipment failure or human error.

(ii) Secondary Containment/Diversions Structures

All storage containers, including tanks, portable tanks, and oil-filled equipment, must be equipped with a means of secondary containment for the contents of the largest container plus sufficient freeboard to allow for precipitation.

(iii) Transfer Operations

Transfer operations consisting of piping, valves, gauges, regulators, pumps and other mechanical devices used to transfer oil are subject to periodic pressure testing. Buried piping must have a protective coating and be cathodically protected if subject to corrosion. Aboveground pipes and valves should be subjected to regular inspections.

(iv) Tank Car and Tank Truck Loading/Unloading

Fuel loading/unloading operations must be equipped with a means of secondary containment designed to hold the contents of the largest compartment of a tank car or tank truck. Fuel loading/unloading operations include: vehicles' fueling activities and the receipt of product from tank trucks or tank cars.

(v) Inspections/Recordkeeping

The written procedures and records of inspections signed by the inspector or supervisor should be maintained for a minimum of three years.

The following types of records should be maintained:

- regular visual inspections of tanks and associated piping, appurtenances and secondary containment areas;
- periodic integrity testing of tanks and buried piping; and,
- records of drainage of rainwater from containment areas.

(vi) Security

The perimeter of a facility should be protected with good lighting, fencing, and locked gates. Access to the facility should be restricted during non-business hours. Any valves that will allow the direct outflow of a tank's contents should be locked.

(vii) Training and Spill Prevention Procedures

Facility owners and operators are responsible for training their employees in oil operations and maintenance of equipment to prevent a spill and applicable pollution control laws. Records of employee training and spill prevention briefings should be maintained for a minimum of three years.

2. NJ Discharge Prevention, Containment and Countermeasure (DPCC)

This is a New Jersey Regulation administered by the NJDEP (N.J.A.C. 7:1E).
<http://www.nj.gov/dep/rpp/brp/index.htm>

(a) Overview of Program

The Discharge Prevention, Containment and Countermeasure (DPCC) regulations establish reporting, design and maintenance requirements for owners or operators that store hazardous substances and/or petroleum products above specified quantities.

(b) Applicability

Flow chart for applicability:

http://www.state.nj.us/dep/enforcement/graphics/flow_7.pdf

The DPCC regulations are applicable to major facilities, which are defined as all facilities located on one or more contiguous or adjacent properties, owned or operated by the same entity and having an aggregate storage capacity of:

- greater than 20,000 gallons of hazardous substances (excluding petroleum);
- greater than 200,000 gallons, including petroleum.

(c) Required Submissions

The owner or operator of a major facility is required to prepare a DPCC Plan and a Discharge Cleanup and Removal (DCR) Plan and submit both plans to the NJDEP for review and approval. If the facility becomes a major facility because of the addition of a substance to the list of hazardous substances, the DPCC and DCR Plans must be submitted to the NJDEP within 180 days of the date the substance was added to the list. For new major facilities, the DPCC and DCR Plans must be submitted to the NJDEP 180 days prior to the planned operation date of the facility.

The owner or operator of a major facility must provide the NJDEP with written notice of any new construction or installation, substantial modification or replacement of any aboveground storage tank or appurtenances at least 60 days prior to the planned construction. Within 30 days of any change in facility design, construction, operation or maintenance, a modified DPCC/DCR Plan must be submitted to the NJDEP. At least once every three years, the owner or operator shall renew the DPCC/DCR Plan. The plan renewal must be submitted 180 days before the expiration date.

(d) DPCC Plan Requirements

The DPCC Plan shall contain the following general information:

1. facility identification, including: name, telephone number, street and mailing address, municipality, county, and tax lot and block number;
2. owner identification, including, name, address, and telephone number;
3. registered agent identification, including name and address, if applicable;
4. site plan in digital format;

5. a drainage and land use map in digital format;
6. topographical map;
7. anticipated date the facility will become operational if it is new; and,
8. if two or more discharge events have occurred in the previous 12 months, a description of each event.

The DPCC Plan shall also include the following technical information:

1. a description of all storage areas, including a discussion of the size and contents of storage tanks and drum storage areas, overfill protection, the schedule for integrity testing and internal visual inspections, and the schedule for maintenance and/or reconstruction;
2. a description of any tank car or tank truck loading/unloading areas, including the size of the largest compartment and types of substances handled;
3. a description of the marking on in-facility pipes and of any maintenance and repair program for buried pipes;
4. a description of all secondary containment or diversion systems, including their capacity and materials of construction;
5. a description of marine transfer areas including substances handled, and booming and lighting operations;
6. a description of any flood hazard areas and measures to protect hazardous substances from flooding;
7. a description of all leak detection and monitoring procedures;
8. an outline of the housekeeping and maintenance program;
9. an outline of the personnel training program;
10. a description of physical security measures;
11. a list of all standard operating procedures;
12. a description of the recordkeeping system employed; and,

13. a schedule for upgrading equipment or portions of the facility to meet the DPCC requirements, if necessary.

(e) DCR Plan Requirements

The DCR Plan shall contain the following information:

1. contact information for the facility's response coordinator or other authorized individual;
2. the chain of command for emergency response actions;
3. notification procedures;
4. provisions for annual emergency response drills;
5. a list of emergency response equipment available on-site or through contract;
6. a list of trained personnel;
7. a deployment plan for personnel and equipment;
8. procedures for determining the recycling or disposal options for hazardous substances or contaminated materials;
9. a copy of a current agreement with the local emergency planning committee; and,
10. a copy of financial responsibility documents.

(f) Certifications

Any information submitted to the NJDEP must be certified by the highest-ranking individual with responsibility for the information contained in the documentation and by a ranking overall official. The DPCC Plan and any amendments to the Plan must be certified by a NJ professional engineer. A DCR Plan containing a deployment plan shall include a certification by a marine biologist, or aquatic biologist, or ecologist, and an ornithologist.

3. Underground Storage Tanks (UST)

Summary of Regulations (N.J.A.C. 7:14B)

The underground storage tank program provides requirements for the registration, recordkeeping and reporting, design and operation and corrective action for all regulated underground storage tank systems. By definition an underground storage tank is any one or combination of tanks, including appurtenant pipes, lines, fixtures, and other related equipment, used to contain an accumulation of hazardous substances, the volume of which is 10 percent or more beneath the surface of the ground. The following tanks or systems are exempt from regulation:

- farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;
- tanks with a capacity of 2,000 gallons or less used to store heating oil for onsite consumption in a nonresidential building;
- tanks used to store heating oil for onsite consumption in a residential building;
- septic tanks installed in compliance with the Realty Improvement Sewerage Facilities Act;
- pipelines;
- surface impoundments, pits, ponds, lagoons, storm water or wastewater collection systems;
- liquid traps or associated gathering lines directly related to oil and gas production and gathering operations;
- tanks situated in an underground area not in contact with soil allowing visual inspection;
- flow-through process tanks;
- wastewater treatment tanks;
- electrical equipment;
- hydraulic lift tanks.

Registration

Owners and operators of all UST systems must complete the New Jersey Underground Storage Tank Facility Certification Questionnaire.

Note: Under N.J.A.C. 7:14B-1.8(b), “no person or firm shall introduce hazardous substances into a regulated underground storage tank which is not properly registered with the Department pursuant to N.J.A.C. 7:14B-2.1.”

- Tank registrations are typically issued for a period of three years.
- The owner or operator of an underground storage tank system shall notify the Department of any change in the ownership or closure of a facility within 30 days.
- The owner or operator of a facility shall submit an amended copy of the New Jersey Underground Storage Tank Facility Certification Questionnaire within 30 days of any facility modifications.
- Within seven days of the closure of a UST system, the owner or operator shall submit a New Jersey Underground Storage Tank Facility Certification Questionnaire.

Compliance

With the exception of heating oil USTs with a capacity of greater than 2,000 gallons used for on-site consumption in a non-residential building, all UST systems were required to meet the requirements for upgraded or new UST systems by December 22, 1998. Owners and operators of heating oil USTs with a capacity of greater than 2,000 gallons were granted an extension to upgrade their substandard UST systems by December 22, 2003, provided a tightness test was conducted prior to August 31, 1999.

New Tank Systems

Owners and operators of underground storage tank systems, which are installed on or after September 4, 1990 (New Tank Systems), shall obtain a permit before installation and ensure that the systems meet at least the following requirements:

- corrosion protection of tanks/pipes;
- spill and overflow prevention equipment that prevents the release of product to the environment; and,
- proper tank installation and certification.

Upgraded Tank Systems

Unless subject to an upgrade extension, owners and operators of existing tank systems (i.e., tanks installed before September 4, 1990) were required to upgrade their tank system in accordance with the following standards or close the tank system and replace it with a new tank system by December 22, 1998:

- provide a means of spill prevention, such as a catch basins, to contain spills from delivery hoses;
- provide a means of overfill protection, such as automatic shutoff devices, overfill alarms, or flow restriction devices; and,
- provide corrosion protection of underground piping and underground tanks.

All Tank Systems

- Owners and operators of new and existing Underground storage tank systems shall provide a method, or combination of methods, of release detection that can detect a release from any portion of the tank and the connected underground piping that routinely contains product.
- All UST systems shall be made of, or lined with, materials that are compatible with the substance stored in the underground storage tank system.
- The owner or operator of an underground storage tank system shall permanently mark all fill ports to identify product inside the underground storage tank system.

Spill and Overfill Prevention

- There shall be no release of hazardous substances due to spills or overfills.
- The available volume in an underground storage tank shall always be greater than the volume of hazardous substance being transferred to the tank.
- The transfer operation must be monitored constantly to avoid spilling and overfilling.

Corrosion Protection

- All corrosion protection systems shall be operated and maintained to continuously provide corrosion protection.
- All underground storage tank systems equipped with cathodic protection systems shall be inspected for proper operation by a Cathodic Protection Tester or Cathodic Protection Specialist.

Release Response

The owner or operator of an underground storage tank system shall prepare a release response emergency plan, which includes the following information:

- the emergency telephone numbers of the local fire department, local health department, NJDEP Hotline (1-877-WARNDEP), and any other appropriate agency;
- the name and telephone number(s) of the facility person responsible for the operation of the facility;
- the name and telephone number of any retained corrective action contractor; and,
- the procedures to be followed in the event of a leak or discharge of a hazardous substance from the facility.

Recordkeeping Requirements

Owners and operators shall maintain the following documentation:

- a corrosion expert's analysis of site corrosion potential, and documentation of operation of corrosion protection equipment;
- compliance with release detection requirements;
- site investigations/remedial investigations; and,
- installation checklist.

Financial Responsibility

Owners and Operators are required to maintain financial assurance for the purpose of remediation and compensating third parties for bodily injuries and property damage as a result of discharges from regulated underground storage

tank systems. N.J.A.C. 7:14B-15 must be consulted for the amounts of financial assurance required.

Suspected Releases

The owner or operator of an underground storage tank system shall complete an investigation of a suspected release within seven calendar days of the discovery of the suspected release.

Confirmed Releases

The owner or operator of an underground storage tank system shall, upon confirming a discharge, immediately report the discharge to the appropriate local health agency in accordance with local requirements, and to the NJDEP's Environmental Action Hotline (1-877-WARNDEP), and shall take immediate action to:

- determine the source of the discharge;
- cease use of the underground storage tank system;
- mitigate any fire, safety or health;
- conduct a visual inspection;
- properly remove all hazardous substances from the underground storage tank system; and,
- repair, replace or close the underground storage tank system.

Out of Service Tanks

The owner or operator of an underground storage tank system, which is out of service, shall notify the NJDEP in writing within 30 calendar days of the tank becoming out of service.

Permanent Closure of Tanks

The owner or operator of an underground storage tank system who intends to close the underground storage tank system shall notify the NJDEP and all applicable municipal and county health departments of the closure activity in writing at least 30 calendar days prior to the anticipated closure date and comply with all other closure requirements.

4. Toxic Catastrophe Prevention Act Program (TCPA)

Applicability (N.J.A.C. 7:31)

See <http://www.nj.gov/dep/rpp/tcpa/>

Requires owners and operators of covered facilities to have an NJDEP approved risk management program if they handle, use, manufacture, store or have the capability of generating an **extraordinarily hazardous substance** (EHS) at certain specified quantities. See TCPA Extraordinarily Hazardous Substance (EHS) List. The risk program includes a Risk Management Plan (RMP).

The **Risk Management Program** is designed to protect the off-site community by preventing catastrophic accidental releases of EHS's and include such things as operating procedures, safety reviews, preventative maintenance, operator training, accident investigation, risk assessment, emergency response, and management of change.

The **Risk Management Plan (RMP)** is a written plan that summarizes the implementation of the risk management program and contains such things as: an executive summary, registration information, an off-site consequence analysis [one worst-case scenario for a toxic and a flammable substance and an alternative release scenario for each toxic substance and one flammable], the five-year accident history, prevention program information [dependent upon NAICS (North American Industrial Classification System – similar to SIC Codes) code must do Program 3 covered process or Program 2 covered process requirements], emergency response program information, a certification, and information on persons involved with the risk management program, a profile of the neighborhood, insurance carrier data, and characterization of the EHS inventory.

Risk Management Program Levels:

Program 3 – in NAICS codes 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, or 32532. Elements in Program 3 - process safety information, process hazard analysis with risk assessment, standard operating procedures, EHS operator training, mechanical integrity/preventive maintenance, management of change, safety reviews [design and pre-startup], compliance audits, EHS accident investigation, employee participation, hot work permit, contractors, and emergency response.

Program 2 – NAICS codes not covered in Program 3. (*Program 1 is not allowed in NJ. Program 2 elements: safety information, hazard review, standard operating procedures, EHS operator training, maintenance, compliance audits, incident investigation, and emergency response.*)

Emergency Response (ER) – 40 CFR 68.95 requirements, initial and annual refresher training of ER team and site personnel, one full-scale ER exercise per year, written assessment of response to incidents and exercises, emergency notification system, and document agreements with outside agencies to respond to releases if employees do not. (Program 2 only).

Management System – Composite of organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing, evaluating and maintaining the required Risk Management Program.

5. Toxic Substances Control Act (TSCA)

Summary of Regulations (40 CFR Parts 700 through 766)

This is a Federal Program administered by the US EPA

<http://www.epa.gov/region5/defs/html/tsca.htm>

The EPA's OPPT Homepage (Office of Pollution Prevention & Toxics) may be found on the Internet at <http://www.epa.gov/opptintr/pubs/opptabt.htm>

TSCA (15 U.S.C. §§2601-2692) was enacted to give the EPA the ability to track the approximately 75,000 industrial chemicals manufactured or imported into the country. The TSCA statute is comprised of four main sections as listed in the table below.

Subchapter	Main Purpose
I. Control of Toxic Substances	Bans chemicals that are determined to pose an unreasonable risk to human health and requires pre-registration of new manufactured chemicals. PCBs fall in this Subchapter.
II. Asbestos Hazard Emergency Response	Requires EPA to promulgate regulations regarding the inspection, and if necessary, remediation of friable asbestos in the nation's schools, and to conduct a study to evaluate the risks to human health posed by asbestos in public and commercial buildings.
III. Indoor Radon Abatement	Establishes programs for the federal and state governments to implement programs to achieve the national goal that air within buildings should be as free of radon as ambient external air.
IV. Lead Exposure Reduction	Requires the promulgation of regulations governing lead-based paint activities, including lead abatement and control of lead-based paint.

Section I is a complex rule regulating chemicals and microbial manufacturing, importing and exporting. Essentially any chemical manufactured, imported and/or exported is to be registered with EPA with a CAS number (Chemical Abstract Service) (40 CFR 710).

Generally a statement of compliance to TSCA registration is stated on the Material Safety Data Sheet (MSDS). US Customs requires assurances to registration for importing chemical (40 CFR 707) Section 8 (c) and (e) of TSCA (40 CFR 717) requires recordkeeping and reporting of adverse health and environmental effects to the EPA. Significant alleged adverse effects not listed on a MSDS are to be reported.

Other requirements included in Subchapter 1:

- TSCA Chemicals and Mixtures Testing Regulations;
- Premanufacture Notices for a new chemical;
- Microbial Commercial Activity Notice for new microorganisms;
- Recordkeeping and reporting requirements for certain chemicals;
- Significant Adverse Reaction Allegations;
- Health and Safety Data Reporting;
- Inventory update rule;
- Chemical information reporting for importing and exporting; and,
- Certain chemicals are regulated under metal working fluids, cooling tower treatment chemicals, PCB's and Asbestos.

Regulation of Polychlorinated Biphenyls ("PCBs") is one of the main objectives of TSCA Subchapter I. EPA regulates this field exclusively, even in New Jersey, where so many other programs have been delegated to the NJDEP. PCBs are addressed through EPA's Office of Pollution Prevention and Toxics ("OPPT").

EPA has promulgated PCB regulations at 40 CFR § 761. The regulations are further divided into subparts that comprise the individual pieces of the PCB regulatory puzzle. First and foremost, the manufacturing of PCBs is prohibited (Subpart A), unless some exemption applies (Subpart E). The regulations include general applicability and definitions (Subpart A), PCB storage and disposal (Subpart D), import and export requirements (Subpart E), recordkeeping requirements (Subparts J and K).

Transformers are among the most common industrial items where PCBs are found. A PCB Transformer may be converted to a Non-PCB Transformer, but the unit must be properly reclassified in accordance with the regulations. Electric utilities may own your transformer and can provide documentation concerning PCBs.

PCB regulation also has unique, detailed provisions regarding the cleanup of PCB spills. These are provided in the PCB Spill Cleanup Policy (Subpart G), which applies to spills after May 4, 1987. Historic spills are covered under Subpart D. The regulations have detailed site characterization and sample collection provisions (Subparts M, N, O, P, and R), analytical procedures (Subparts Q and T), and decontamination procedures (Subpart S).

6. Community Right-To-Know

State Requirements

N.J. State Community Right to Know Surveys

The Community Right to Know (CRTK) program collects, processes, and disseminates the chemical inventory, environmental release and materials accounting data required to be reported under State and Federal laws. As part of a Federal broad-based statute called the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, also known as the Emergency Planning and Community Right to Know Act (EPCRA) and a New Jersey Worker and Community Right to Know law (N.J.S.A 34:5A, N.J.A.C. 7:1G), pertinent facilities must annually report a Community Right-to-Know Survey. Included on this survey are the hazardous substances used, stored or manufactured that are on the Environmental Hazardous Substance (EHS) list (Table A) in the CRTK Survey book, or Federally reportable substances under Section 312 of EPCRA, (DEQ-094).

The New Jersey law applies to facilities in covered North American Industry Classification System (NAICS) codes. Form DEQ-094 must be filled out for each Environmental Hazardous Substance on Table "A" produced, stored, or used beyond any threshold quantity.

Basic Information Required

- Facility background, chemical information, hazards, inventory levels, containers, etc.
- Surveys due March 1st of each year for previous reporting year and also, surveys are to be sent to County Lead Agents, local Police/ Fire/ Local Emergency Planning Committees (LEPCs). (The DEP mailing address for Community Right to Know Surveys is on the following page.)

Send original completed forms to:
NJDEP
Community Right to Know Survey
PO Box 405
Trenton, NJ 08625-0405

Surveys may also be submitted online at <http://www.nj.gov/dep/online/>

Federal TRI Annual Reporting

Section 313 of EPCRA and its New Jersey state law counterpart both stipulate that TRI annual reporting is required for all industry numbers within SIC Major Groups 10, 12, and 20-39 or with SIC Industry Numbers 4911, 4931, 4939, 4953, 5169, 5171, and 7398. There are also certain threshold amounts for manufacturing (including importing), processing and using certain types of toxic chemicals. Moreover, TRI reporting is not required for companies with 10 or more full-time employees.

A completed Form "R" or shortened Form "A." Federal Pollution Prevention Act is now integrated into Form "R"s.

Form "R" Part I basic information: Facility I.D. information, certification.

Form "R" Part II (Chemical Specific) basic information: Chemical I.D., use, maximum inventory, waste streams, transfers, treatment, recycling, source reduction.

Form "R's" or Form "A's" are due July 1st of year for prior year reporting.

Further Information/Forms: <http://www.epa.gov/enviro/html/tris/>

N.J. Release and Pollution Prevention Report

The state form, the Release and Pollution Prevention Report (DEQ-114), also requires the reporting of materials balance and pollution prevention information.

Applicability: (See N.J.A.C. 7:1G) *One must file the State Form (RPPR or DEQ-114) if the Federal requirements above are met (on a per chemical basis). In general, one must report for every EPA Toxic Chemical Release Form (Form R and Form A) filled out.*

- Additional chemicals may need to be reported if they were manufactured, processed or otherwise used at 10,000 pounds, even if they were not reported on the TRI reporting form.

Note: EPA Form "R"s, must also be sent to the State.

- Information required (DEQ-114): facility information, certification, chemical I.D./use/inventory, releases, disposal, transfers, pollution prevention progress, and process level pollution prevention for targeted processes.
- DEQ-114's are due annually on July 1st for the previous reporting year.
- A formal Pollution Prevention Plan is due every five (5) years (to be made available on site for potential audit). A Pollution Prevention Plan Summary must also be submitted to the Department.

Effective reporting year 2005, pollution prevention planning is not required for any hazardous substance if the sum of the non-product output of the substance plus the amount of the substance shipped in or as product does not exceed 500 pounds, as determined from the value reported in Section B of the most current Release and Pollution Prevention Report.

Also effective reporting year 2005 and thereafter: all production processes that use, or generate as non-product output, persistent, bioaccumulative, toxic (PBT) substances must be targeted for Part II pollution prevention planning if the facility level quantities of the PBT are above the Federal TRI reporting thresholds.

All Release and Pollution Prevention Reports and Pollution Prevention Plan Summaries must be submitted online at <http://www.nj.gov/dep/online/>

For information: 609-777-0518

7. NJ Right to Know Labeling Requirements

New Jersey also has unique Right-To-Know labeling requirements under N.J.A.C. 8:59. These programs were developed to make local communities and emergency responders aware of hazardous chemicals at a particular site.

Applicability: Special labeling required for all non-consumer quantity/quality products and chemicals is to be adhered to on all containers, fill ports, vents, etc., for facilities with applicable NAICS Codes. Special attention is to be given to secondary containers (i.e. those containers used in the transfer or alternate storage of the contents obtained from the main, original properly labeled container). Labeling on these secondary containers must fully adhere to N.J. State Right-To-Know labeling requirements.

- Labels to contain “Legible” information on all containers, vents, fill ports, and discharge points for all chemicals/systems whether hazardous or not.

- Information must have chemical name, chemical abstract number (C.A.S.#), and OSHA hazard statement. (Alternate: TSRN # i.e. trade secret registry number with OSHA hazard statement).
- Mixtures require “top 5” hazardous substances, each with the above information.
- Industrial grade/quantity products require appropriate label information given above.
- Consumer retail products in consumer retail quantities are exempt from this regulation.
- Labels to include air and water.

Reference: Section 302, 304, 311, 312 and 313, of Title III of the federal Superfund Amendments and Reauthorization Act of 1986; NJ Worker and Community Right-To-Know Act (N.J.A.C. 7:1G, N.J.A.C. 8:59)

Federal Applicability

Federal Section 311/312 Community Right-to-Know Listing

Applicability: Those facilities that have EPA extremely hazardous substances exceeding threshold planning quantities, and/or OSHA hazardous substances with inventory of 10,000 pounds or more.

- List EPA Extremely Hazardous Substances with Inventory exceeding the threshold planning quantity (Include Hazard Classification).
- List OSHA hazardous substances with Inventory of 10,000 pounds or more. (Include Hazard Classification.)
- Send report to local office of emergency management (Township, County, State, or otherwise). Send report to Local Fire Department.
- EPCRA Section 304 requires reporting of releases of extremely hazardous substances to the NJDEP and to the Local Emergency Planning Committee (LEPC).

Unplanned Releases

Reportable Quantities (RQ) specified at 40 CFR Part 355 Appendix A.

- Pertains to air, water and groundwater discharges.

- Immediate release notification to National Response Center required (1-800-424-8802).
- Immediate notification to NJDEP at 1-877-WARNDEP also required.

National Service Center for Environmental Publications (EPA)
<http://www.epa.gov/ncepihom>

8. Pesticide Control Code (N.J.A.C. 7:30)

The New Jersey Pesticide Control Code concerns the lawful use and application of pesticides in New Jersey. The Code also contains provisions addressing the unlawful release of pesticides in the State. These liability and reporting provisions are parallel to the similar provisions in the New Jersey Spill Compensation and Control Act. The pesticide provisions are triggered whenever there is a release, or the potential for a release, of pesticides “into the air, into any adjacent property, into any drain or sewer, into any source of potable water, into any ground water or into any of the waters of this State.” N.J.A.C. 7:30- 9.8(a).

Whenever there is such a release, the following parties are liable: the owner of the property, the person responsible for the presence of the pesticides, and any person responsible for the release. N.J.A.C. 7:30-9.8(b). All three categories of responsible parties are all responsible for “immediately” notifying the New Jersey Department of Environmental Protection, Pesticide Control Program, about the release (or potential for release). N.J.A.C. 7:30-9.8(c).

These pesticide regulations also contain remediation standards for pesticide releases, which standards are parallel to, and cumulative with, the Site Remediation Program’s Technical Requirements for Site Remediation, N.J.A.C. 7:26E. Thus, as stated in the regulations, if there is a spill of pesticides, the responsible parties must notify both the Site Remediation Program and the Pesticide Control Program, and both Programs have oversight authority over the remediation. See N.J.A.C. 7:30-10.7 - 10.9. (As a practical matter, the Pesticide Control Program will often defer to the Site Remediation Program, so long as the Site Remediation Program has exercised its oversight authority.) If both Programs do exercise authority, then the responsible parties must obtain approval of any remedial actions from both Programs prior to implementing any remedial work.

With few exceptions, facilities that perform their own on-site pesticide use must be licensed by the Pesticide Control Program. This includes the use of herbicides, insecticides, pesticides for the control of pests in cooling waters or cooling towers, rodent control pesticides, and fumigants. Facilities that hire a professional company to perform this work should make sure that the company is properly licensed and has licensed individuals to apply pesticides.

The Pesticide Control Code also provides for the imposition of substantial penalties against any parties responsible for the release, or potential for release, of pesticides. Many of the penalties, however, can be reduced or avoided altogether by prompt notification to the Pesticide Control Program, and by prompt remedial action.

III. WASTE

1. Sanitary and Solid Waste

(a) Summary of Regulations (N.J.A.C. 7:26)

The overall regulation of non-hazardous solid and liquid waste is enforced by the New Jersey Department of Environmental Protection in the State of New Jersey. However, the recycling, staging, and containerization / compaction of these wastes can vary from county to county and from township to township, relative to available waste hauling contractor abilities. Recycling is mandatory statewide for those materials designated in county solid waste plans and municipal recycling ordinances. Additional materials (such as components of the construction / demolition waste stream) may be recycled at the discretion of the generator, and an extensive network of DEP approved recycling facilities exist for this purpose.

Because of various court decisions in the 1990's, waste is no longer flowed to specific facilities on a statewide basis, though several counties have reinstated waste flow in a court-sanctioned manner. This is one environmental area where you must contact county officials. Hazardous waste (see Hazardous Waste Section), as defined, must be coordinated with licensed Hazardous Waste Handlers (for small or large volume generators). Facilities generating less than 220 pounds of hazardous waste/month may have additional disposal options for the waste they generate.

Applicability: All facilities must use licensed non-hazardous waste handlers, per the definition of solid and liquid waste types provided below. Recycling is mandatory, though the specific materials to be recycled may change from county to county. Hazardous waste must be treated special as indicated above and as indicated in the Hazardous Waste Section. See current solid waste regulations at NJAC 7:26-2.13 for up to date waste codes and definitions.

(b) Solid Waste Types/Definitions

10 - Municipal (household, commercial and institutional): Waste originating in the community consisting of household waste from private residences, commercial waste which originates in wholesale, retail or service establishments such as, restaurants, stores, markets, theatres, hotels and warehouses, and institutional waste material originated in schools, hospitals, research institutions and public buildings.

12 - Dry sewage sludge: Sludge from a sewage treatment plant which has been digested and dewatered and does not require liquid handling equipment.

13 - Bulky waste: Large items of waste material, such as appliances and furniture. Discarded automobiles, trucks and trailers and large vehicle parts, and tires are included under this category.

13C - Construction and demolition waste: Waste building material and rubble resulting from construction, remodeling, repair, and demolition operations on houses commercial buildings, pavements and other structures. The following materials may be found in construction and demolition waste: treated and untreated wood scrap; tree parts, tree stumps and brush; concrete, asphalt, bricks, blocks and other masonry; plaster and wallboard; roofing materials; corrugated cardboard and miscellaneous paper; ferrous and non-ferrous metal; non-asbestos building insulation; plastic scrap; dirt; carpets and padding; glass (window and door); and other miscellaneous materials; but shall not include other solid waste types.

23 - Vegetative Waste: Waste materials from farms, plant nurseries and greenhouses that are produced from the raising of plants. This waste includes such crop residues as plant stalks, hulls, leaves, and tree wastes processed through a wood chipper. Also included are non-crop residues such as grass clippings, tree parts, shrubbery and garden wastes.

25 - Animal and food processing wastes: Processing waste materials generated in canneries, slaughterhouses, packing plants or similar industries, including animal manure when intended for disposal and not reuse. Also included are dead animals. Deceased animals that are intended for cremation in an animal crematorium with the residual ashes either returned to the pet owner or interred in a burial plot at a legalized pet cemetery, or deceased animals intended for interment at a legally recognized pet cemetery are not considered solid waste (carcasses which are cremated at a crematorium but whose final destination of the residual ashes is a solid waste facility are considered disposed of and are considered solid waste). Animal manure when intended for reuse or composting, is to be managed in accordance with the criteria and standards developed by the Department of Agriculture.

27 - Dry industrial waste: Waste materials resulting from manufacturing, industrial and research and development processes and operations, and which are not hazardous in accordance with the standards and procedures set forth at 7:26G. Also included are non-hazardous spill clean up waste, dry non-hazardous pesticides, dry non-hazardous chemical waste, and residue from the operations of a scrap metal shredding facility.

27A - Waste material consisting of asbestos or asbestos containing waste.

27I - Waste material consisting of incinerator ash or ash containing waste.

(c) Liquid Waste Types

72 – Non-hazardous liquid and semi-liquids: Liquid or a mixture consisting of solid material suspended in a liquid media which is contained within, or is discharged from, a vessel, tank or other container which has the capacity of 20 gallons or more. Also included are non-hazardous pesticide liquids. Not included in this waste classification are septic tank clean-out wastes and liquid sewage sludge.

73 - Septic tank clean-out wastes: Pumpings from septic tanks and cesspools. Not included are wastes from a sewage treatment plant.

74 - Liquid sewage sludge: Liquid residue from a sewage treatment plant consisting of sewage solids combined with water and dissolved materials.

(d) Hauling Alternatives

Depending on local waste hauler availability, numerous types of containers, sizes, and compactors are generally available that will normally meet your needs and requirements. Lease and trucking / staging costs and service reliability vary widely, so you may want to look at different vendors and their references. Waste flow regulations can vary from county to county, so you must contact either the DEP or the county to verify local requirements.

(e) Recycling

Recycling is mandatory statewide, though specific mandates on materials may vary from county to county. Your county and municipal offices and local waste handlers are well versed in these requirements, and they should be contacted directly. Some municipalities and county governments annually inspect and audit recycling activities at commercial/industrial locations. Certain record-keeping requirements apply. (Check with your local governing body).

Environmentally speaking, it is recommended that recycling, beyond those materials mandated in a county solid waste plan or municipal recycling ordinance, be implemented whenever possible and wherever available. In many cases, it is also the economic thing to do. Rebates, free containers, and free hauling are often available and largely depend on the quantity, purity, and quality of recycled commodities. Compactors and shredders are often available and can be leased or purchased. Certain vendors, moreover, have specialty licensed transfer stations called Materials Recovery Facilities (MRFs) where the separation of recyclables from non-recyclables can take place.

The law allows for even designated recyclable materials to be separated at these permitted facilities, but this is subject to certain reporting requirements, and the

issuance of a municipal exemption from source-separation ordinances. If your hauler has contracted with one such MRF, you may find that your municipal recycling coordinator will grant your business an exemption from the requirement to separate out the designated mandatory recyclables from your waste stream.

Examples of today's recycled materials include wood, metal, aluminum cans, paper, plastic, cardboard, batteries, and certain types of construction/demolition waste.

(f) Special/Secured Landfills

Certain types of pharmaceutical, cosmetic, and other consumer good "off-spec" waste, may require that the waste be shipped to a secured landfill so that pilferage / re-sale does not take place. Shredding of material before disposal may be required by the company itself, while new incinerator options are now also available to ease security concerns.

An index of resources collated by the DEP can be found here:
<http://www.state.nj.us/dep/dshw/recycling/index.html>

2. Hazardous Waste

(a) Summary of Regulations (40 CFR 260 - 270; N.J.A.C. 7:26G)

In response to media exposés such as the now infamous "Love Canal" disaster in Niagara Falls, New York, the Federal Government passed "RCRA" legislation (Resource Conservation Recovery Act) in 1980 to monitor and control the storage, transportation and disposal / transfer of hazardous waste in the United States. This set of regulations was immediately delegated to the State of New Jersey regarding implementation, enforcement and control of the Program.

(b) Applicability

Facilities generating over 220 pounds in a calendar month but less than 2,200 pounds in a calendar month, shall be deemed a "Small Quantity Generator" (SQG) while a facility generating over 2,200 pounds in a calendar month shall be classified a "Large Quantity Generator" (LQG). In both cases, RCRA mandates are applicable with minor variations. Those sites generating less than 220 pounds in a calendar month and storing less than 2,200 pounds (=2.2 pounds of "acute" hazardous waste) are exempt from full regulation, but are subject to reduced regulatory requirements. However, the DEP urges those who are "exempt," to contact your Municipal Office concerning the storage / disposal of hazardous waste that is not to be put into the sanitary waste stream (i.e. garbage).

(c) The main types of listed hazardous waste:

- F Waste : General Process Waste
- K Waste : Specific Process Waste
- P Chemicals : Acute Hazardous Waste
- U Chemicals : Toxic Waste

(d) A waste is hazardous if it exhibits the following characteristics:

1. Ignitability (40 CFR 261.21)
 - Flammable with flash point less than 140°F
 - Oxidizers that yield oxygen which stimulates spontaneous combustion
2. Corrosivity (40 CFR 261.22)
 - $\text{pH} \leq 2.0$
 - $\text{pH} \geq 12.5$
3. Reactivity (40 CFR 261.23)
 - Explosive Mixtures / materials that violently react with air, heat, cyanides, and sulfides
4. Toxicity (Toxic Characteristic Leachate Procedure TCLP) (40 CFR 261.24)
 - Heavy metals (i.e. mercury, lead, etc)
 - Benzene, carbon tetrachloride, chloroform, etc.

Notes:

1. Hazardous waste can emanate from non-specific sources, specific sources, discarded chemicals / off-spec products, out-dated material/products, a mixture that contains one or more hazardous waste, waste oils/sludge, laboratory waste, paints, thinners, or batteries.
2. "Hazardous waste" cannot be diluted to make it "non-hazardous".
3. Portions of the hazardous waste cannot be removed from the hazardous waste to subsequently make it "non-hazardous".

(e) Storage Rules:

- LQG: = 90 days
- SQG: = 180 days or 270 days if shipping > 200 miles
- Exempt generators: unlimited, provided that less than or equal to 2,200 pounds is stored
- Greater than 90 days LQG generator now becomes a TSDF (Treatment / Storage / Disposal Facility) which must involve a RCRA "Part B" permit application (very lengthy and costly process).

(f) Major Regulatory Requirements

Designated area(s) for hazardous waste accumulation should be established. Each drum, box, or stretch-wrapped pallet of containers must be marked with the words "Hazardous Waste" and with the date of initial accumulation. The containers must be closed when not in use. Weekly inspections must be performed in each area.

Satellite accumulation is permitted near the point of generation. Each satellite container must be marked with either the words "Hazardous Waste" or with the description of the contents. The container must be closed when not in use. EPA/DOT shipping labels are required on all containers to be shipped in DOT approved containers.

A hazardous waste manifest must be completed and signed (generator, EPA ID Number, transporter). Copies are sent to the TSDF state receiving the waste and the State of New Jersey, as applicable. Transporter and generator must keep their own copy of the manifest. The TSDF facility sends to the generator a receipt copy.

The licensed approved transporting vehicle must be properly placarded when hazardous waste exceeds 1,000 pounds (except consumer commodities).

The following records must be maintained:

- Manifests for 3 years (SQG and LQG);
- Formal bi-annual reporting (LQG);
- Written Contingency Plan (LQG);

- Emergency Response Procedure Plan (SQG-strongly recommended and LQG-required);
- Training records (SQG and LQG);
- Community Right-To-Know records (SQG and LQG);
- Liquid disposal restriction forms (SQG and LQG);
- Proof of familiarization of generator's hazardous waste with fire department, police, and local hospital (SQG and LQG);
- Emergency Response Contractor Agreement (SQG and LQG);
- Copies of hazardous substance Material Safety Data Sheets (MSDS's) (SQG and LQG);
- Exception reporting for copies not received from TSDF's within 35 days (LQG);
- Location and capabilities of fire extinguishers and spill control equipment (SQG and LQG);
- Emergency phone numbers posted near telephone (SQG and LQG);
- Waste Analysis Plan (LQG-written plan);
- Issues Regarding Primary Storage Areas of Hazardous Waste (SQG and LQG);
- Fire extinguishers (SQG and LQG);
- Ignitable or reactive hazardous waste must be stored at least 50 feet from the facility's boundary line (LQG);
- Maintain adequate aisle space for evacuation, inspecting drums, etc. (e.g. no less than 3 feet) (LQG);
- Weekly inspections of containers and written records of the same (LQG).

3. Universal Waste

In the State of New Jersey, the universal waste requirements regulate the following types of waste: batteries, pesticides, thermostats, lamps, mercury containing devices, oil-based finishes, and consumer electronics. The standards for the management of universal waste are found in New Jersey's recycling

regulations at N.J.A.C. 7:26A-7.

Universal waste generators or collectors/accumulators may be classified into two categories: (1) small quantity handlers of universal waste and (2) large quantity handlers of universal waste.

A small quantity handler of universal waste accumulates a total of less than 5,000 kilograms (11,025 pounds) of universal waste at any time.

A large quantity handler of universal waste accumulates more than 5,000 kilograms (11,025 pounds) of universal waste at any one time. Both large and small quantity handlers and transporters of universal wastes are subject to the management standards and other regulatory requirements found at N.J.A.C. 7:26A-7. These standards are less stringent than the full hazardous waste regulatory requirements.

4. Regulated Medical Waste

In New Jersey, Regulated Medical Waste (RMW) consists of several classes, including cultures and stocks of infectious agents and associated biologicals, human pathological waste, human blood and blood products, needles syringes and sharps, contaminated animal waste including carcasses, isolation wastes from patients with highly communicable diseases. Each of these classes of RMW are required to be treated (to kill pathogens or disease-causing organisms) and destroyed (ground or minced into small unrecognizable pieces) prior to disposal at an authorized solid waste management facility.

Examples of RMW generators include doctors, dentists, veterinarians, hospitals, healthcare facilities, nursing, assisted living and convalescent homes, medical analytical laboratories, outpatient surgical clinics, biomedical research facilities, funeral homes, schools, and body piercing and tattoo parlors.

NJDEP and NJDHSS regulate medical waste under N.J.A.C. 7:26-3A (RMW Regulations). The RMW Program goal is to protect health care providers and workers, waste haulers, refuse workers and the general public from potential health risks associated with RMW. The Department of Environmental Protection and the Department of Health and Senior Services jointly share responsibilities to administer this program:

NJDEP Registers RMW Generators; RMW Transporter Registration and Inspections; Intermediate Handlers & Destination Facilities Registration & Inspections; Annual Reports; Technical Assistance; Authorize Alternative Technologies	NJDHSS RMW Generator Inspections Needle-stick Incident Investigations RMW Abandonments and Emergencies Efficacy Assessment of Alternative Technologies http://www.state.nj.us/health/eoh/phss/
---	--

The New Jersey medical waste regulations require all regulated medical waste generators, transporters, intermediate handlers and destination facilities to track RMW, no matter how small the amount generated. Each generator shipping RMW off-site is responsible for initiating the New Jersey RMW Tracking Form. Each person in the chain of custody (handling process) of RMW assumes the responsibility for getting the waste to the proper destination facility for treatment, destruction or disposal. Copies of the tracking form must be retained for at least three years from the date the waste was accepted by the initial transporter unless the Department specifically requires an additional retention period.

All Generators of more than 220 lbs of RMW during the reporting period must also complete and submit an Annual Generator Report (forms are provided by the NJDEP) to the Department for the period of June 22 through June 21 of each calendar year by July 21 of each calendar year (N.J.A.C. 7:26-3A.21(d)) unless the Department specifically changes the reporting or filing date.

For additional information see <http://www.nj.gov/dep/dshw/rntp/rmw.htm>
Also, the Division of Solid and Hazardous Waste Web site:
<http://www.state.nj.us/dep/dshw/index.html>

IV. WATER

1. Regulatory Overview

The Federal Water Pollution Control Act Amendments of 1972 (a.k.a. Clean Water Act) established the regulatory framework for the National Pollutant Discharge Elimination System (NPDES) Program. The NPDES program regulates the point source discharge of pollutants into waters of the United States. To control “indirect discharges” of pollutants from industries to Publicly Owned Treatment Works (POTWs). The National Pretreatment Program was established as a component of the NPDES Program. In many states, including New Jersey the NPDES Program is administered on a state level, pursuant to the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and N.J.A.C. 7:14.

2. Water Quality

In New Jersey, the goal of the water quality programs is to protect the waters of the State. Key elements of New Jersey’s Water Quality Programs include the NJPDES (New Jersey Pollutant Discharge Elimination System) Permitting Program for surface water, groundwater and stormwater discharges, the Pretreatment Program, and the Treatment Works Approval Program. Each of these programs are described in the following sections.

(a) New Jersey Pollutant Discharge Elimination System (N.J.A.C 7:14A)

The New Jersey Pollutant Discharge Elimination System (NJPDES) Program was established under the authority of the New Jersey Water Pollution Control Act and the Federal Water Pollution Control Act. This program regulates the discharge of wastewater from municipal and industrial sources to surface waters and groundwaters of the State, and point source discharges of stormwater.

(i) Discharge to Surface Water Permits

Facilities with a point source discharge of any of the following wastewater streams into a surface water body (e.g., stream, river, lakes, wetlands) are required to obtain a NJPDES Discharge to Surface Water (DSW) Permit:

- sanitary/domestic wastewater;
- non-contact cooling water;
- contact cooling water;
- process related wastewater;

- wastewater from an industrial treatment system;
- remediated groundwater (treated or untreated);
- filter backwash, boiler blowdown, or floor drains; or,
- stormwater commingled with any of the above discharges.

The regulated discharger is responsible for submitting the following information in application for a NJPDES Permit:

- Form NJPDES-1
- NJPDES Technical Form (Form C)
- NJPDES Form R (Part-A)

Copies of these forms can be obtained from the NJDEP's web site as follows:

<http://www.state.nj.us/dep/dwq/forms.htm#dswforms>

If the wastewater discharge is a new discharge, an increase in flow, or a change in the method of discharge the following information is required:

- Evidence of permit application submission to the affected sewerage entities and municipality, if applicable.
- Consistency Determination (All projects must be consistent with the Areawide Water Quality Management (WQM) Plan. If the project is not consistent with the WQM Plan, an amendment to the plan must be approved.)

Facilities with valid NJPDES DSW Permit are required to submit an application for renewal a minimum of 180 days prior to the expiration of the existing permit.

(ii) Discharge to Groundwater Permits

Facilities discharging any of the following to groundwater are required to obtain a NJPDES Discharge to Groundwater (DGW) Permit:

- sanitary wastewater with a design flow of greater than 2,000 gallons per day, or
- industrial wastewater, including: non-contact cooling water, process wastewater, contact cooling water.

Types of discharges regulated include: surface impoundments, infiltration/percolation lagoons, overland flow systems, spray irrigation systems,

and subsurface disposal systems (e.g., septic systems). Most groundwater discharges are regulated by an individual permit, however, general permits are available for the following: sanitary subsurface disposal systems, stormwater basins, and potable water treatment plant drying beds.

The following information must be submitted in application for a NJPDES DGW Permit:

- Form NJPDES-1
- Site Plan
- Topographic Map
- Line Drawing
- Form R
- Local Notice

Additionally, a permit application for a new discharge or a previously unpermitted discharge must include the following:

- Consistency Determination (new discharge only) (All projects must be consistent with the Area-wide Water Quality Management (WQM) Plan. If the project is not consistent with the WQM Plan, an amendment to the plan must be approved.)
- Technical Report

Facilities with valid NJPDES DGW Permit are required to submit an application for renewal a minimum of 180 days prior to the expiration of the existing permit.

(iii) Stormwater Permits

The following types of stormwater discharges are required to obtain a stormwater permit:

- a discharge associated with industrial activity;
- a discharge from a municipal separate storm sewer serving a population of 100,000 or more.

Because this digest is intended to provide guidance to small businesses, this discussion shall focus on discharges associated with industrial activity. The following types of facilities are considered to be engaged in industrial activity:

- facilities subject to stormwater effluent guidelines, new source performance standards, or toxic pollutant effluent standards;
- facilities with the following Standard Industrial Classification (SIC)

codes: 24, 26, 28, 29, 311, 32, 33, 3441 or 373;

- facilities with the following SIC Major Groups that discharge stormwater contaminated by contact with or that has come into contact with overburden, raw material, intermediate products, finished products, by-products or waste products: 10, 12, 13, or 14;
- hazardous waste treatment, storage or disposal facilities;
- landfills, land application sites and open dumps;
- facilities involved in the recycling of materials and classified with the following SIC codes: 5015 or 5093;
- steam electric power generating facilities;
- transportation facilities with the following SIC codes which have vehicle maintenance shops, equipment cleaning operations or airport de-icing operations: 40, 41, 42, 43, 44, 45, or 5171;
- treatment works treating domestic sewage or any other sewage sludge, or wastewater treatment device or system used in the storage, treatment, recycling and reclamation of municipal or domestic sewage;
- construction activities that result in the disturbance of five acres or more of total land;
- facilities with the following SIC codes are only considered to be engaged in industrial activities if material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products or industrial machinery are exposed to the stormwater discharge: 20 – 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31, 323, 34-39, 4221, 4222, or 4225 (this category will be hereinafter referred to as light industry).

For facilities subject to the stormwater permitting requirements there are two options; a stormwater general permit or an individual permit. A general permit provides a set of standard conditions that are applicable to various facilities due to similar types of activities. An individual permit is a site-specific permit that takes into account individual operating conditions. A description of the types of general permits available in New Jersey and an overview of the eligibility requirements is presented below. Any facility that wishes to receive authorization under a general permit, should carefully review the conditions of the permit prior to application.

- Basic Industrial Stormwater Permit (NJ0088315) – This permit is available to certain industrial facilities that have eliminated or can eliminate within 18 months all exposure of industrial source material to stormwater.
- Construction Activity Stormwater General Permit (NJ0088323) – This permit is generally used for construction activities that disturb greater than one acre of land. This general permit is administered by the 16 Soil Conservation Districts.
- Scrap Metal Facilities Stormwater General Permit (NJ0107671) – This permit is generally applicable to facilities with an SIC code of 5093 or 5015. The permit provides industry-specific Best Management Practices (BMP).
- Concrete Products Stormwater General Permit (NJ0108456) – This general permit is available to facilities that manufacture concrete products and is applicable to facilities with the following SIC codes: 3271, 3272, and 3273.

The application process for a general permit is similar for each of the different types of general permits and consists of submission to the NJDEP the following information: the Request for Authorization (RFA) (specific to each permit), the RFA Certification, arrangements for Public Notice in the local newspaper, a copy of the USGS quadrangle map indicating the facility location and the appropriate fee. For the Construction Activity General Permit, the RFA and appropriate fee must be submitted to the local Soil Conservation District.

To apply for an individual stormwater permit, the following information must be submitted to the NJDEP: Form NJPDES-1, NJPDES Technical Form (RF), and NJPDES Form R.

All stormwater permits contain the following basic requirements: (1) preparation, implementation, and certification of a Stormwater Pollution Prevention Plan, (2) compliance requirements with the Soil Erosion and Sediment Control Act for construction activities (except for permits issued under the construction category), and (3) a fee schedule. Individual stormwater permits will generally include a monitoring and reporting requirement.

A current listing of available general NJPDES permits (as of 9/21/06) can be found here: <http://www.state.nj.us/dep/dwg/pdf/webgplst.pdf>

(b) Pretreatment Program

To control the discharge of pollutants from industries (or “indirect users”) to Publicly Owned Treatment Works (POTW), the US EPA established the

National Pretreatment Program as a component of the NPDES Permitting Program. The Pretreatment Program establishes three types of discharge limitations. These include: general discharge standards, categorical standards, and local limits. The general discharge standards and categorical standards have been established on a Federal and/or state level. The local limits are established by individual POTWs. The National Pretreatment Program also requires all large POTWs (i.e., those treating greater than 5 million gallons per day [gpd]) to establish a local pretreatment program. The State of New Jersey has been delegated the authority by the US EPA to implement the Pretreatment Program. In New Jersey, certain delegated local authorities are granted the authority to implement an Industrial Pretreatment Program (IPP). If the local authority has not been granted status as a delegated authority, the IPP is implemented by the NJDEP.

(i) Requirements for Indirect Users

An indirect user is defined as any discharge into a domestic treatment works. An indirect user is not required to obtain a permit. However, a "Significant Indirect User", discussed below (see also N.J.A.C. 7:14A-1.2) may be required to obtain a permit. All indirect users are required to comply with the general discharge standards. The general discharge standards prohibit the discharge of the following:

- any pollutant which causes pass-through or interference;
- pollutants which create a fire or explosion hazard in the POTW;
- pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0;
- solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
- any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a Discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
- heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40 °C (104 °F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;
- petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

- pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and,
- any trucked or hauled pollutants, except at discharge points, designated by the POTW.

Additionally, indirect users discharging petroleum based oil and grease must meet the following petroleum hydrocarbon effluent limitations, unless the POTW has determined that more stringent limits apply:

- average monthly concentration shall not exceed 100 mg/l, and,
- the concentration in any single sample shall not exceed 150 mg/l.

(ii) Significant Indirect Users

In addition to compliance with general discharge standards, a significant indirect user may need to obtain a discharge permit. A significant indirect user is any user who discharges wastewater into a local agency and is either:

- a. A user that is defined as a Significant Industrial User (40 C.F.R. §403.3(t), excluding municipal collection systems, when:
 - the user is subject to the Categorical Pretreatment Standards under 40 CFR 403.6;
 - the average volume of process wastewater exceeds 25,000 gpd;
 - the amount of BOD, COD, or suspended solids in the industrial wastewater discharge exceeds the mass equivalent of 25,000 gpd of the domestic waste of the local agency;
 - the volume of industrial process wastewater in the discharge exceeds five percent or more of the average daily dry weather flow of the local agency;
 - the user's discharge of process wastewater contributes, five percent or more of the daily mass loading of any of the pollutants listed in N.J.A.C. 7:14A-4, Appendix A, Tables II through V; and
 - the user is designated as an SIU by the control authority based on potential impacts from the use, history of compliance, or to meet the purposes of the Pretreatment Act; or,

b. Is a user in areas where the NJDEP is the implementing authority (“control authority”), where

- The user is a hazardous waste facility;
- The user discharges landfill leachate; or,
- The user discharges 25,000 gpd or more of process or polluted groundwater

However, any potential significant indirect user that is not subject to Categorical Pretreatment Standards may be determined not to be a significant indirect user if its use will not cause any adverse effects or violate applicable standards.

Categorical Pretreatment Standards establish effluent guidelines and standards on pollutant discharges to POTWs from specific process wastewaters and particular industrial categories. The Categorical Pretreatment Standards apply to an indirect user, regardless of whether the indirect user has a pretreatment permit, or whether the POTW has an approved IPP.

(c) Treatment Works Approvals (TWA)

Any person engaging in the following activities is required to obtain a treatment works approval from the NJDEP:

- building, installing, modifying, or operating any treatment works, including but not limited to sewer extensions, sewer interceptors, domestic and industrial wastewater treatment systems, holding tanks, equalization tanks and wastewater treatment and recycling systems;
- building, installing, modifying or operating any sewer line, pumping station or force main which serves more than two buildings or will convey 8,000 gallons per day (gpd) or more of flow to a treatment works;
- increasing the flow in an existing sewer line by 8,000 gpd or more;
- building, installing, operating or modifying any residuals treatment units, including but not limited to facilities for composting, heat drying, thickening, digestion, air drying, thermal reduction, dewatering and storage of sludge;
- building, installing, operating or modifying any domestic or industrial treatment works that discharges directly to the surface water or ground water of the State; and,
- building, installing, operating or modifying any industrial treatment

works located in any area of the State where the NJDEP is the control authority for an IPP.

A summary of some of the activities that are exempt from the requirement to obtain a treatment works approval is provided below. A full list of exemptions is presented in N.J.A.C. 7:14A-22.4.

- Building, installing, modifying or operating any sewer lateral which will convey less than 8,000 gpd.
- Building, installing, modifying or operating any wastewater pumping equipment which utilizes a lateral force main connection, whether publicly or privately owned, to serve a facility whose project flow is less than 8,000 gpd.
- Building, installing, operating or modifying a septic system or other subsurface disposal system where the aggregate projected flow of the facility is less than or equal to 2,000 gpd.
- For existing facilities, and regardless of current flow, aggregate increases in the project flow of less than 8,000 gpd over a five-year period resulting from internal plumbing modifications, building additions, renovations or changes in use of a facility. This exemption does not apply to projects served by individual subsurface disposal systems or small treatment plants (i.e., less than 150,000 gpd) that discharge to groundwater.
- Building, installing, operating or modifying any industrial treatment works discharging into a publicly owned treatment works and located in an area of the State for which the NJDEP is not the control authority (delegated area) for the industrial pretreatment program.
- Building, installing, operating or modifying an American Petroleum Institute approved gravity oil/water separator, a retention or detention basin, sand traps or sediment traps that are installed routinely in facilities such as car washes, truck wash bays and other similar discharges, when these systems are authorized under a general NJPDES permit, have been determined not to require a NJPDES permit, or are exempted from obtaining a NJPDES permit pursuant to this chapter or are stormwater management facilities.
- Building, installing, operating or modifying any of the following activities or facilities:
 - grease traps for use in restaurants;

- cooling towers for non-contact water/heat exchange units;
- holding tanks for wastewater which is solely industrial in nature and the amount to be hauled to a treatment works will be less than 8,000 gallons per day, and the tank will have a total volume of 21,000 gallons or less;
- recycling systems for industrial waste only, which do not discharge directly to the surface water or ground water; and,
- stormwater management facilities.

A treatment works approval consists of the following three stages:

- Stage I is an optional preliminary or conceptual review of the treatment works. The NJDEP recommends a Stage I review and approval for any new sewage treatment plant or plant expansion.
- Stage II is an approval to construct, install or modify a treatment works.
- Stage III is an approval to operate a treatment works that has been constructed or has received a stage II approval. Stage II and III approvals may be issued concurrently.

The NJDEP will approve, condition or deny an application for a treatment works approval within 90 days of receipt of a complete application. A complete application must include the following:

- Application Form TWA-1, signed and sealed;
- Engineers Report Form WQM-006, signed and sealed;
- Consent Form WQM-003;
- Application Review fee;
- Construction Cost Estimate;
- Receipts of Public Notification from the Municipal Planning Board and the Municipal Environmental Commission;
- USGS Quadrangle Map;
- Final Plans and Profiles, signed and sealed;

- Construction Specifications, signed and sealed; and,
- Sewer Connection Ban Exemption, if applicable.

Applications for General industrial TWAs must also include the following:

- Licensed Operator Grading Sheet Form DWR-175;
- Engineer's Certification for General Industrial TWAs, signed and Sealed;
- Engineer's Abstract; and,
- For direct dischargers or indirect dischargers required to obtain a NJPDES/SIU Permit, a copy of a valid NJPDES Permit or General NJPDES permit authorization.

3. Water Supply Program

(a) Water Allocation (N.J.A.C. 7:19)

- Permit to divert surface or subsurface waters (non-agricultural). A permit is needed for a project or facility to divert more than 100,000 gallons per day of water for more than 30 days in a 365-day period from surface or groundwater for non-agricultural purposes.
- The threshold for a Water Allocation Permit or Water Use Registration is 50,000 gpd within the Highlands Preservation Area.
- Be aware of drought or water restrictions on water supply and use.

(b) Well Drilling (N.J.A.C. 7:9D)

- A NJ licensed well driller is needed for the following: boring, coring or excavating of a well used for any of the following: dewatering, domestic, fire, geothermal, heat pump, industrial, injection, irrigation, livestock, oil and gas exploration, water supply, public community water, public non-community water system, recharge, test, boring/probe hole, cathodic protection, gas vent, monitoring/observation, piezometer, or recovery.
- A NJ licensed well driller of proper class and permit to drill wells is required to modify the physical construction of a well (i.e. well deepening, new screen).

- A permit is not required to seal an abandoned well, but only NJ licensed well drillers certified to seal wells can perform such work.

(c) *Safe Drinking Water*

- Approval or certification from either a local or county health department is required if the project receives potable water supply by development of, or connection to, Public Non-Community Water Supply Water System (i.e. a system serving 25 or more people per day at least 60 days of the year).
- A plan must be submitted to the Bureau of Safe Drinking Water for approval if project will receive potable water supply by development of, or connection to, individual non-public water systems involving the development of 50 or more realty improvements.
- A plan must be submitted to the Bureau of Safe Drinking Water for approval if project will receive potable water supply by development of, or connection to, a Public Community Water System serving 25 or more year-round residents. A plan must also be submitted if you: develop or modify a water supply (well or intake structure); develop or modify a pumping system; develop or modify a treatment plant; develop or modify a water distribution system consisting of more than 15, but less than, 50 service connections, or requiring more than 1,500 linear feet of water main; and use of any non-potable water supply (process or cooling water).

Division of Water Quality Web site: <http://www.state.nj.us/dep/dwq/index.html>
Permitting and Technical Information for DWQ:
<http://www.state.nj.us/dep/dwq/permitng.htm>

V. AIR

1. New Jersey Air Permitting (N.J.A.C. 7:27)

(a) Objectives for Permitting

- Determine that all equipment has required air permits.
- Assess compliance with applicable State and Federal regulations.
- Determine compliance with specific permit conditions.

(b) Types of Air Permits

- Pre-construction Permits (N.J.A.C. 7:27-8 “Subchapter 8 Permits”)
 - Minor facility
 - Based on Potential to Emit (PTE)
 - Multiple permits (unit-by-unit based)
- Title V Operating Permits (N.J.A.C. 7:27-22 “Subchapter 22 Permits”)
 - Major facility
 - Based on PTE
 - Single facility-wide permit (Contains all applicable requirements)

(c) Potential to Emit (PTE)

- PTE is defined to be: the maximum capacity for a source operation or facility to emit air contaminants based on physical and/or operational design.
- Federally-enforceable restrictions on operating hours, type and amount of materials processed, fuels combusted, and emission control apparatus are treated as design limits. [N.J.A.C. 7:27-8.1]

(d) Major Source PTE Thresholds - Subchapter 22 – Title V Operating Permits

- 100 tons per year (TPY) for Total Suspended Particulates (TSP), Particulate Matter (PM-10), Sulfur Dioxide (SO₂), and Carbon Monoxide (CO).
- 25 TPY for Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOC).
- 10 TPY for Lead and Hazardous Air Pollutant (HAP).
- 25 TPY for Total HAP.
- Includes fugitive emissions for 27 selected source categories.
- Also includes facilities subject to Acid Rain, Prevention of Significant Deterioration (PSD), Maximum Achievable control Technology (MACT) standards, and solid waste incinerators – units (250TPD).

(e) Minor Source Thresholds- Facilities Subject to Subchapter 8

Subchapter 8 air permitting requirements apply to “minor” facilities and include those that are not considered “major” under Title V or facilities whose emissions fall below all Subchapter 22 PTE thresholds, and is not a PSD facility. An existing source operated prior to 1967 which has not been reconstructed or modified, and is still operable, is considered “grandfathered” and an air permit is not required (other, more recent grandfathering dates may also apply).

(f) Some of the Sources Subject to Subchapter 8 Air Permitting Requirements (N.J.A.C. 7:27-8.2 (c))

- Commercial fuel burning equipment (greater than or equal to 1.0 MM Btu/hr).
- Equipment which has potential to emit Group 1 or 2 Toxic Substances (TXS) at a rate greater than 0.1 pounds per hour.
- Dry cleaning equipment.
- Surface cleaners (degreasers).
- Printing and graphics arts operations (greater than or equal to 0.5 gal/hr).
- Metal etching and plating tanks (greater than 100 gal each).

- Transfer operation involving gasoline or other regulated VOCs or marine vessel tank loading or ballasting operation, if required to have control device or submerged fill.
- Liquid storage tanks (greater than 10,000 gal) – certain exclusions apply.
- VOC liquid storage tanks (greater than or equal to 2,000 gal.) – certain exclusions apply.
- Solids storage bins (greater than 2,000 cu. ft.).
- Stationary material handling equipment (conveyors).
- Surface coating and painting operations (greater than or equal to 0.5 gal/hr).
- Non-commercial fuel burning equipment.
- Incinerators.
- Equipment used to treat groundwater, industrial wastewater, or municipal wastewater (less than 2% solids) but containing VOCs or group 2 TXS in excess of 3,500 ppb or a group 1 TXS in excess of 100 ppb.
- Equipment used to treat waste soils or sludges-if influent 2% solids or greater.
- Equipment used to vent a landfill (open, closed, sanitary, hazardous) or other solid waste facility (landfills, transfer stations, recycling, and commercial or municipal solid waste composting operations).
- Equipment that shreds -wood if engine power has heat input of one million BTU/Hr or greater.
- Equipment using more than 50 pounds per hour of all raw materials excluding air, water, container which are not consumed in operation and paper, metal plastic that is twisted bent or folded with no visible emissions.
- Welding equipment, if weight of welding rod or wire used is greater than 12 pounds in any calendar day. And,
- any stationary reciprocating engines with a maximum rated power output of 37 KW or greater, used for generating electricity, not including emergency generators.

(g) Exemptions to Subchapter 8 Air Permitting Requirements (N.J.A.C. 7:27-8.2 (d))

- Storage tanks maintained at a pressure greater than 1 atmosphere pressure.
- Tanks or bins used to store agricultural commodities on a farm.
- Stationary tank: for food grade liquids; or operating temperature not greater than 350 degrees F; and vapor pressure, excluding water, less than 0.02 pounds per square inch absolute or at 70 degrees F whichever is higher.
- Tank has no visible emissions, does not emit any air contaminant (including no odor detectable at property line), tank not subject to federal regulations, PTE for each TXS and each HAP does not exceed de minimis reporting thresholds, % by weight of all HAPs collectively greater than 1.0 %, plus recordkeeping requirements.
- Lagoons and basins at domestic and Publicly Owned Treatment Works (POTW).
- Copying and duplicating equipment.
- Hand-held buffing, drilling, sawing and grinding equipment.
- Battery charging stations (except at a battery manufacturing facility).
- Onsite maintenance shops, laundry operations (no dry cleaning or dryers, or boilers greater than 1 million BTU), architectural maintenance, and food preparation not part of the production process.
- Vessel has less than 1000 gallons for mixing or blending for mixing, or blending of solids and liquids or solids only in non-reactive process provided.
 - Vapor pressure less than 1.5 pounds per square inch; and
 - Vessel equipped with control to remove particulates at minimum of 99 % or located inside a room with control to remove particulates at minimum of 99 %; and
 - Criteria met:
 - No visible emissions.
 - No odors detectable at property line.
 - Source criteria (Located in enclosed area equipped with

heating and ventilation; emissions vented directly to work area and free from local exhaust venting system; and meets OSHA indoor air quality standard).

(h) General Permits Currently Available- (N.J.A.C. 7:27-8.8)

- Bulk Solid Material Handling and Storage Systems.
- Confined Abrasive Blasting Equipment.
- Woodworking Equipment.
- Service Stations (Stage 1 and 2).
- Emergency Generator (less than 500 hr/yr).
- Boilers less than 10 million BTU/hr.
- Boilers and Heaters (Individually less than 10 million BTU/hr).
- VOC Storage Tanks (non-floating roof).
- Gasoline Service Station Site Remediation.
- Boilers and other indirect fired external combustion equipment greater than 10 million BTU/Hr and less than 50 million BTU/Hr. Degreasing operation using NO_x HAP VOC's degreasing operations using only methylene chloride or 1,1,1 Trichloroethane Perchloroethylene Dry cleaners Non HAP Dry cleaners service stations (stage 1 only) Non-MACT plating operations small emitters whose emissions are less than reporting thresholds listed in subchapter 8.
- External Combustion units less than 10 million BTU/hour.
- NON-HAP Degreasers.
- Degreasing Operations Using Only Methylene Chloride or 1,1,1-Trichloroethane Solvents.
- Perchloroethylene Drycleaning Facilities.
- Non-HAP Drycleaning.
- Stage 1 for Storage and Transfer of Service station Fuels at Small Gasoline Distributors.

- Non-MACT Plating Operations.
- Small Emitter General Air Permit (SEGAP).
- Research and Development.

2. Clean Air Act and Title V Permitting

(a) Regulatory Background and Applicability

- The United States Environmental Protection Agency (USEPA) has promulgated regulations establishing a comprehensive operating permit program in accordance with the requirements of Title V of the Clean Air Act (CAA) Amendments of 1990.
- The Title V program in New Jersey is administered by NJDEP. The NJDEP has adopted its Title V program as Subchapter 22 (N.J.A.C. 7:27-22).
- Subject facilities include “Major Facilities” with potential to emit greater than the following thresholds:
 - 100 tons/year CO, SO₂, TSP, or PM-10;
 - 25 tons/year NO_x, VOC, or total HAPs;
 - 10 tons/year of an individual HAP; or
 - 100 tons/year of any other air contaminant.
- Certain non-major facilities are also subject to Title V permitting including area source MACT and NSPS affected facilities.
- Existing major facilities began submitting applications for initial Title V operating permits as early as May 15, 1995, and all applications were to be in by May 1998.
- Newly subject facilities must submit within one year of becoming affected.
- NJDEP statistics currently show 333 Title V approved permits statewide.
- There are a total of 336 facilities subject to Title V requirements.
- All Title V applications require a comprehensive certification of compliance for all applicable air quality regulatory requirements.
- Reporting of any outstanding non-compliance is also required. To do so, the facility must have performed a comprehensive air quality compliance audit. This is what Congress intended when it wrote

Title V into the 1990 CAA Amendments.

(b) Title V Application/Permit Content

- The facility profile consists of the administrative information for the facility. Information such as SIC Code, address, longitude and latitude, and facility contact names and phone numbers are necessary for NJDEP to identify the facility and process the permit application.
- The component inventory (equipment inventory, control device inventory, and stack inventory) and potential to emit inventory involve an in-depth identification of all emission sources ("source operations") and their respective emissions and operating scenarios. Source operations consist of all stationary sources of air contaminants.
- The Title V application requires a detailed compliance plan. An acceptable compliance plan must provide a compendium of all applicable air quality regulatory requirements for each source operation. The plan must also specify the compliance status for each of these applicable requirements, including how compliance is determined and how it will be continuously demonstrated. If a source operation is not in compliance with an applicable requirement, a compliance schedule must be developed for each non-compliant source operation.
- Ultimately, after the required public and USEPA comment periods, the compliance plan will become the final permit.

(c) Title V Permit Compliance

- Self-enforcement is emphasized under Title V.
- A comprehensive compliance management system is necessary.
- Each Title V facility is responsible for documenting and certifying compliance as follows:

1) Six-Month Deviation Reports:

Facilities must identify all deviations from testing and monitoring requirements, including those attributable to emergencies, startup, shutdown and maintenance, the probable cause of such deviations, and any corrective actions or preventive measures taken. The six-month

deviation reports must be submitted on July 30 for the period from January 1 through June 30, and by January 30 for the period from July 1 through December 31. Note: Reporting does not commence with your first full six-months under a Title V permit. For example, if your Title V was approved on 12/30/05, you still owed NJDEP a deviation report on 1/30/06 for your two days of operation during the reporting period.

2) Annual Compliance Certifications:

Title V facilities are required to certify annually (to NJDEP and USEPA) that they are in compliance with all of the conditions of the permit. This certification must cover each applicable requirement and lay out whether compliance was achieved continuously, intermittently, or not at all and must also state the methods used to determine the facility's compliance status. The annual compliance certification is due within 60 days after the end of each calendar year during the operating permit was in effect.

- Title V Permits have a five-year term. Renewal applications are due 12 months prior to expiration, but NJDEP recommends submittal 15 months prior to expiration.
- Modifications to Title V Permits can be made via four mechanisms: 1) Administrative Amendments, for the most trivial changes, 2) seven-day Notice Changes for minor changes that don't effect emissions, 3) Minor Modifications for more significant changes, and 4) Significant Modifications for the most involved changes. Both Minor Modifications and Significant Modifications require pre-approval. Both involve some level of USEPA review while Significant Modifications also require public review. It's not uncommon for Minor Modifications to require three to six months for approval, while Significant Modifications can require more than a year.

3. Other NJ Permitting Requirements

(i) Subchapter 16: Control of VOC

- Definitions and Applicability [N.J.A.C. 7:27-16.1]
- Storage of VOC [N.J.A.C. 7:27-16.2]
- Gasoline Transfer Operations [N.J.A.C. 7:27-16.3]
- VOC Transfer Operations [N.J.A.C. 7:27-16.4]
- Marine Tank Vessels [N.J.A.C. 7:27-16.5]

- Open Top Tanks and Surface Cleaners [N.J.A.C. 7:27-16.6]
- Surface Coating and Graphics Arts [N.J.A.C. 7:27-16.7]
- Boilers [N.J.A.C. 7:27-16.8]
- Stationary Gas Turbines [N.J.A.C. 7:27-16.9]
- Stationary Internal Combustion Engines [N.J.A.C. 7:27-16.10]
- Asphalt Plants [N.J.A.C. 7:27-16.11]
- Flares [N.J.A.C. 7:27-16.13}
- Other Source Operations [N.J.A.C. 7:27-16.16]
- Facility-Specific VOC Controls [N.J.A.C. 7:27-16.17]
- Leak Detection and Repair [N.J.A.C. 7:27-16.18]
- Cutback and Emulsified Asphalts [N.J.A.C. 7:27-16.19]
- Petroleum Solvent Dry Cleaning [N.J.A.C. 7:27-16.20]
- Natural Gas Pipelines [N.J.A.C. 7:27-16.21]

(ii) Subchapter 16 Requirements

- Applies to source operations at a VOC-emitting facility.
- Typically requires 90% capture efficiency and 90% control, or an “alternative VOC control plan”.
- Provides for a case-by-case Reasonable Available Current Technology (RACT) determination for sources that cannot meet the prescriptive Subchapter 16 requirements [N.J.A.C. 7:27-16.17(c)]

(iii) Subchapter 18: Emission Offset Rule

- Applies to major new or modified sources of criteria pollutants and VOC
- Subchapter 18 is triggered if emission increases over the last 5 years are greater than 25 TPY for NO_x or VOC. Other thresholds apply for other criteria pollutants.

- Affected sources must perform air dispersion modeling analyses and install Lowest Achievable Emissions Rate (LAER) technology.
- Affected sources must obtain sufficient emission reduction credits (ERC) equal to the amount of the emissions increase plus “offset ratio” (1.3 : 1 or 2 : 1)

(iv) Subchapter 19: Control of NOx

- Definitions and Applicability [N.J.A.C. 7:27-19.1 and 19.2]
- General Provisions [N.J.A.C. 7:27-19.3]
- Boilers serving electric generating units [N.J.A.C. 7:27-19.4]
- Stationary Gas Turbines [N.J.A.C. 7:27-19.5]
- Emission Averaging [N.J.A.C. 7:27-19.6]
- Industrial/commercial/institutional boilers and other indirect heat exchangers [N.J.A.C. 7:27-19.7]
- Stationary Internal Combustion Engines [N.J.A.C. 7:27-19.8]
- Asphalt Plants [N.J.A.C. 7:27-19.9]
- Glass Manufacturing [N.J.A.C. 7:27-19.10]
- Emergency generators - recordkeeping
- Facility-specific NOx Limits [N.J.A.C. 7:27-19.13]
- Procedures for Approvals [N.J.A.C. 7:27-19.14]
- Procedures for Demonstrating Compliance [N.J.A.C. 7:27-19.15]
- Adjusting Combustion Processes [N.J.A.C. 7:27-19.16]
- Source Emission Testing [N.J.A.C. 7:27-19.17]
- Continuous Emission Monitoring [N.J.A.C. 7:27-19.18]
- Recordkeeping and Reporting [N.J.A.C. 7:27-19.19]
- Fuel Switching [N.J.A.C. 7:27-19.20]
- Phased Compliance [N.J.A.C. 7:27-19.21 to 23]
- MEG Alerts and Emergency Fuel Oil Use [N.J.A.C. 7:27-19.24 and 25]

(v) Subchapter 21 - Emission Statements -PTE Thresholds

- 100 TPY for TSP, PM-10, SO₂, and CO
- 25 TPY for NOx
- 10 TPY for VOC
- 5 TPY for Lead

(vi) State-of-the-Art (SOTA) Triggers [N.J.A.C. 7:27-8.12]

- The new or modified piece of equipment has emissions greater than 5 TPY of VOC, TSP, SO₂, NOx, or CO.
- Emissions of HAP or TXS are greater than the SOTA thresholds. (See Appendix 1, Table B of N.J.A.C. 7:27- 8)

(vii) SOTA Requirements

- Comply with the emission limitations or control technology requirements contained in the SOTA Manual (less than 25 TPY), or
- Perform a case-by-case SOTA analysis to evaluate the feasibility of various controls and determine the cost per ton of pollutant reduced for each control options (greater than 25 TPY).

(viii) SOTA Manual List

- General State of the Art Manual
- Storage Tanks
- Transfer Operations
- Refineries
- Asphalt Plants
- Pharmaceutical/Chemical Manufacturing
- Surface Cleaners/Degreasers
- Surface Coaters and Spray Booths
- Ethylene Oxide Sterilizers
- Municipal Waste Water Treatment
- Site Remediation
- Bakery Ovens
- Boilers, Engines, Turbines
- Glass Plants
- Graphic Arts Industry
- Paint, Ink, and Adhesive Manufacturing Industries

VI. NJ SITE REMEDIATION PROGRAM

1. New Jersey Spill Compensation and Control Act

- Regulations at N.J.A.C. 7:1E.
- The Spill Act was enacted in 1976 in response to proposed oil drilling off the New Jersey coast and is the foundation of New Jersey's regulation of hazardous substances and hazardous wastes.
- The Spill Act imposes liability on a person "in any way responsible" for a "discharge" of "hazardous substances." The Spill Act regulations include a comprehensive list of "hazardous substances," N.J.A.C. 7:1E, Appendix A.
- Persons "in any way responsible" include the current owner of a property, the current operator of a property, for former owners and operators when the discharge occurred in the past. This liability is far-reaching, as it is strict, joint and several, and retroactive.
- A "discharge" is a release that gets to the environment, meaning the lands or waters. A "discharge" does not include a "leak," which is a release to an impervious surface that is cleaned up or a release within a double-walled tank system.
- Defenses to liability include: acts of war, acts of sabotage, or acts of God, or any combination thereof; compliance with a permit; innocent purchaser; due diligence; or covenant not to sue.
- When there has been a discharge of hazardous substances, the person in any way responsible must report the incident to the NJDEP Spill Notification "Hotline" (1-877-WARNDEP). This call must be made "immediately," which means within 15 minutes. A follow-up report documenting the steps taken to address the discharge must be submitted within 30 days of the discharge.

2. Industrial Site Recovery Act

- Regulations at N.J.A.C. 7:26B.
- While the Spill Act was designed to address discharges of hazardous substances as they are discovered, ISRA (formerly known as the Environment Cleanup Responsibility Act, "ECRA") is a "buyer protection" statute designed to ensure that properties are not transferred or abandoned in a contaminated condition.

- The policy of ISRA is to prevent the sale or transfer of real property in a contaminated condition, which is accomplished by requiring that notice be given to the NJDEP of certain business and real estate transactions which are subject to the statute (known as “triggers”). As a pre-condition of the transaction, the environmental conditions of the site must first be assessed and, if required, cleaned up pursuant to NJDEP regulations.
- ISRA applies to the sale or transfer of an “Industrial Establishment.” To determine whether a proposed transaction will “trigger” ISRA, it is necessary to evaluate whether the transaction will involve a so-called “Industrial Establishment.” Industrial Establishment is a defined term encompassing a facility that:
 - North American Industry Classification System (NAICS) specified within the Act; and,
 - uses hazardous substances or wastes.
- NAICS Code
 - ISRA applies to Industrial Establishments having NAICS codes listed in Appendix C of the ISRA regulations N.J.A. C. 7:26B.
 - The classification methods described in the NAICS Manual must be applied strictly, as required by NJDEP policy and the court decisions in this context. The NAICS determination is based on the primary activity of the industrial establishment.
 - If it is determined that a proposed acquisition has a non-subject NAICS code, there is a regulatory mechanism through which one may seek from the NJDEP a confirmatory letter that the facility in question is not subject to the Act. These are known as Letters of Non-applicability (LNA) or applicability determinations.
- Use of Hazardous Substances
 - The second prong in determining whether a facility is an “Industrial Establishment” involves the facility’s “generation, manufacture, refining, transportation, treatment, storage, handling, or disposal of hazardous substances or wastes.”
 - ISRA provides an alternate compliance procedure for those facilities that only use small quantities of hazardous substances - the De Minimis Quantity Exemption. N.J.S.A. 13:1K-9.7 and

N.J.A.C. 7:26B-2.3. This alternative compliance procedure requires NJDEP approval of a submission reporting on the quantity present. The De Minimis Quantity Exemption provides that a facility will be exempt if:

- during the life of the facility's operations it did not handle, store, or dispose of more than 500 pounds or 55 gallons of hazardous substances or wastes at any one time; and,
- the aggregate amount of lubricating or hydraulic oil did not exceed 220 gallons at any one time.

▪ ISRA Triggers

- Cessation of operations means a 90% reduction in operations.
- Subject transfers include conveyances of real property or 99-year leases, mergers, sales of stock, or sales of assets.

▪ ISRA Administrative Process

- General Information Notice (GIN)
 - The GIN is a short form identifying the Industrial Establishment and its location, its NAICS code, the current owner, the ISRA triggering transaction, the purchasing party if the property is being sold, and a certification that the information is true, accurate, and complete.
 - The GIN must be submitted within five days of a triggering event, and thus, the GIN gives notice to the NJDEP that a subject transaction is about to occur.

▪ Negative Declaration Affidavit

- ISRA compliance can be achieved by filing a Negative Declaration Affidavit, which requires a certification that there has either been no discharge of hazardous substances, or that any discharge of hazardous substances has been investigated and remediated in accordance with NJDEP regulations.

- In response, the NJDEP will issue a “No Further Action” letter (“NFA”), which concludes ISRA, allowing the proposed transaction to proceed to closure.
- Remediation Agreement (RA) or Remedial Action Workplan (RAW)
 - By entering into an RA or Remedial Action Workplan (RAW) pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E), the NJDEP allows the ISRA subject transaction to proceed before completion of the environmental investigation and/or remediation, while the subject party agrees to post some type of financial assurance, also known as a remediation funding source, in an amount equal to the estimated cost of investigation and cleanup.
- ISRA Substantive Process
 - The first step of the substantive environmental investigation is called a Preliminary Assessment (PA).
 - The PA requires a visit to the site and preparation of a report, including the completion of an NJDEP PA form. The PA identifies and defines potential environmental concerns.

The PA requests the provision of the following:

- the ownership and operational history of the site;
 - the hazardous substance and waste inventory;
 - a summary of waste water discharges;
 - description of current and historical operations;
 - the identification of Areas of Concern (AOC), which are portions of the property which are potentially contaminated;
 - a history of discharges of hazardous substances;
 - a submission of historical environmental data;
 - a list of federal and state environmental permits;
 - an accounting of enforcement actions taken against the facility; and
 - a site plan with AOCs identified.
- If further investigation of AOCs is necessary, then the next step is preparation of a Site Investigation Report (SI) followed by a remedial investigation report, if contamination is found.
- Landlord and Tenant
 - If the tenant is an Industrial Establishment, then ISRA will be

triggered by sale of the real property or termination of the lease.

- The lease will often allocate responsibility for ISRA compliance at the end of the lease term or when the tenant otherwise ceases operations.

3. Voluntary Cleanup Program

- Regulations at N.J.A.C. 7:26C.
- Sometimes the market requires a party to cleanup a site even when not directly under NJDEP oversight. For example, a bank may require a cleanup as a condition of financing. The party may obtain NJDEP oversight by entering into a Memorandum of Agreement (MOA). An MOA is essentially a contract between a party and the NJDEP.

4. Technical Regulations

- Regulations at N.J.A.C. 7:26E.
- Investigations and cleanups are governed by the Technical Requirements for Site Remediation, which are uniform regulations applicable to all NJDEP Site Remediation projects, regardless of the regulatory oversight program.

5. Enforcement

- The NJDEP can enforce its regulations. An Administrative Order and Directive may require a violator to comply or risk being shut down. The Order may be accompanied by a civil Administrative Penalty. The NJDEP, acting with the Attorney General's office, can also bring legal action in Superior Court for both equitable and legal relief. Resolution of disputes may be accomplished by an Administrative Consent Order.
- In some cases, violations of environmental laws involve criminal penalties. In New Jersey, criminal liability is enforceable through the Attorney General's office.

NJDEP Site Remediation Program Web site: <http://www.state.nj.us/dep/srp/>

VII. GENERAL LAND USE PROGRAMS

1. Introduction

- Most land use regulation is administered at the local level pursuant to the Municipal Land Use Law.
- The NJDEP regulates certain aspects of land use in order to protect human health and the environment.

2. Freshwater Wetlands

- New Jersey Regulations at N.J.A.C. 7:7A.
- At the federal level, wetlands are regulated pursuant to section 404 of the Clean Water Act.
- This authority has been delegated to the NJDEP, although the Army Corps of Engineers retains jurisdiction over navigable waters and adjacent wetlands.
- NJ Freshwater Wetlands Protection Act prohibits “regulated activities” in a freshwater wetland or State open water without a permit. Also prohibits regulated activities within the transition area of wetlands with exceptional or intermediate resource value.
- Wetlands maps are available at NJDEP, but a property owner should request a Letter of Interpretation (LOI) to precisely delineate the boundaries of regulated wetlands and transition areas.
- Wetlands are identified based on the three-parameter approach:
 - hydrology
 - soils
 - vegetation
- Resource Value of Wetlands
 - Exceptional
 - Connected to trout production waters or tributaries
 - Habitat for threatened or endangered species
 - Transition area is 150 feet
 - Intermediate
 - All others
 - Transition area is 50 feet

- Ordinary
 - Ditches (man-made) and swales
 - Isolated and surrounded by development
 - Less than 5,000 square feet
 - No transition area
- Permits
 - Statewide General Permits
 - Certain specific activities that allow limited disturbance
 - Transition Area Waivers
 - Averaging plans or width reductions are allowed under certain standards
 - Individual Permits
 - Pre-application meeting is recommended
 - Alternatives analysis required and must demonstrate that impact on wetland is minimized and the project is in the public interest
 - Mitigation requirements

3. Tidal Wetlands

- Regulations at N.J.A.C. 7:7 and N.J.A.C. 7:7E.
- Regulated coastal wetlands are identified on promulgated maps, available from NJDEP.
- Unmapped coastal wetlands are regulated under the Freshwater Wetlands Protection Act.
- Estuarine environment. Coastal wetlands include land now or formerly connected to tidal waters whose surface is at or below high water, and may extend to an elevation of one foot above extreme high water.
- For the purpose of promoting the public safety, health and welfare and protecting public and private property, wildlife and marine fisheries, the Act empowers DEP to adopt, revise, or repeal orders.
- Mitigation requirements provide for the creation or restoration of an area of wetlands at least two times the area disturbed. Mitigation for wetlands subject to the Freshwater Wetlands Protection Act shall meet the standards of N.J.A.C. 7:7A.

- Coastal wetland transition area is up to 300 feet. Transition area associated with wetlands subject to the Freshwater Wetlands Protection Act wetlands are regulated in accordance with N.J.A.C. 7:7A.
- Development on lands now or formerly flowed by the mean high tide of a natural waterway must first have permission from the State to use these lands, in the form of a Tidelands license, lease or grant.

4. Waterfront Development Act

- Regulations at N.J.A.C. 7:7 and N.J.A.C. 7:7E.
- Within the CAFRA area and Hackensack Meadowland Development District the Waterfront Development Act regulates below the mean high water line, any fill, excavation, dredging, the placement of structures such as bulkheads and docks, floating homes moored more than 10 days, and aids to navigation.
- In all other areas of the State the regulated waterfront area includes any tidal waterway and all lands lying thereunder, up to and including the mean high water line, and an adjacent upland land area that extends no less than 100 feet and no more than 500 feet landward of the mean high water line.
- Applies to man-made lagoons.
- General Permits are available for certain minor activities.
- Exemptions exist for in-kind replacement of certain legally existing structures, such as bulkheads and bridge deck replacement.
- Development on lands now or formerly flowed by the mean high tide of a natural waterway must first have permission from the State to use these lands, in the form of a Tidelands license, lease or grant.

5. Flood Hazard Area Control Act (Stream Encroachment)

- Regulations at N.J.A.C. 7:13.
- Goal of the program is to address and reduce risks from flooding by regulating certain development and other activities that occur near surface water and to minimize the degradation of water quality and to protect wildlife and fisheries by preserving and enhancing water quality and the environment associated with the flood plain and the watercourses that create them.
- Depending on the activity, a Minor Permit or Major Permit would apply.

- Jurisdictional determinations to determine if a permit is necessary are available.

The Division of Land Use Web site, which has information on Waterfront Development Permits, Stream Encroachment, Tidal and Freshwater Wetlands can be found here: <http://www.state.nj.us/dep/landuse/index.html>

5. Dam Safety

- Regulations at N.J.A.C. 7:20.
- The construction, operation, maintenance, demolition, reconstruction, modification and repair of dams in New Jersey is governed by the Dam Safety Standards. A “dam” is any structure, whether temporary or permanent, that raises the water level five feet or more above the usual mean, low water height.
- The Dam Safety Standards are enforced by the New Jersey Department of Environmental Protection, Dam Safety Section.
- Private dam owners are responsible for determining the dam hazard classification, the hydraulics and hydrology of the dam system, the structural integrity of the dam, channel and spillway, and the design criteria.
- Additionally, the owners have substantial monitoring and reporting requirements, which requirements are heightened if the existing dam does not meet the design criteria for its dam hazard classification. Wear of the dam can cause the Dam Safety Section to order that a private dam be removed (to eliminate the hazard of a breach), or to be renovated (to bring the dam up to compliance with its design criteria).

Dam Safety and Flood Control Web site - <http://www.state.nj.us/dep/damsafety/>

VIII. AREA-SPECIFIC LAND USE PROGRAMS

1. Coastal Area Facility Review Act (CAFRA)

- Regulations at N.J.A.C. 7:7 and 7:7E.
- CAFRA was enacted to limit harms caused by development along New Jersey's coastline. CAFRA regulates certain developments in a broad coastal area and is applicable to all public and industrial development. The regulated area extends from the confluence of the Cheesequake Creek and Raritan Bay in Middlesex County, along the Atlantic Ocean coastline and Delaware Bay, and then northwest along the Delaware River to Pennsville, Salem County.
- The coastal area includes all riparian, tidelands, and coastal wetlands acreage, encompassing 1,376 square miles of land area, and ranges in width from a few thousand feet to 24 miles, totaling 18 percent of the State's land area.
- The coastal area is divided into four zones:
 - (Zone 1) beach and dune zone;
 - (Zone 2) 150-foot zone -- 150 feet inland from the beach, the dunes, or the mean high waterline, whichever is most landward;
 - (Zone 3) 500-foot zone -- between the 150-foot zone and 500 feet from the beach, dunes, or mean high waterline, whichever is most landward; and,
 - (Zone 4) inland zone – landward of the 500-foot zone.
- Any and all development in Zone 1 requires a permit. All public or industrial developments in Zones 2-4 require a permit.
- There are four types of CAFRA Permits:
 - General Permits are the most simple and are available for certain types of development. They do not require an Environmental Impact Statement ("EIS") or a public hearing.
 - Individual Permits are required for most major development projects and can be costly and time-intensive.
 - Permits-By-Rule are available for minor developments.
 - Emergency Permits are available in limited circumstances.

CAFRA Web site - <http://www.state.nj.us/dep/landuse/coast.html>

2. New Jersey Meadowlands Commission

- The New Jersey Meadowlands consists of the wetlands area in Hudson and Bergen Counties, including portions of:
 - Carlstadt
 - East Rutherford
 - Jersey City
 - Kearny
 - Little Ferry
 - Lyndhurst
 - Moonachie
 - North Arlington
 - North Bergen
 - Ridgefield
 - Rutherford
 - Secaucus
 - Teterboro

- Formerly known as the Hackensack Meadowlands Development Commission, the New Jersey Meadowlands Commission was created by the Hackensack Meadowlands Reclamation and Development Act (N.J.S.A. 13:17-1).

- The purpose of the Act is to develop the New Jersey Meadowlands while at the same time protect the area's ecological significance.

- Land use is regulated in the Meadowlands by the Hackensack Meadowlands Master Plan.

Meadowlands Commission Web site - <http://www.hmdc.state.nj.us/>

3. Pinelands Comprehensive Management Plan

- Regulations at N.J.A.C. 7:50.

- The Pinelands, also known as the "Pine Barrens," comprise over one million acres of forested area. The Legislature passed the Pinelands Protection Act ("Act"), N.J.S.A. 58:10A-6, to preserve this area and to control development within it.

- The Act created a Pinelands Commission, which is a political subdivision exercising governmental authority. The Pinelands Comprehensive Management Plan ("Plan") sets forth development standards and policies, and all development in the jurisdiction must conform to the Plan. Regulated areas include the Pinelands

Protection Area, where development may occur in accordance with the Plan, and the Pinelands Preservation Area, where development incompatible with natural preservation are prohibited. Development within the Pinelands is not permitted prior to the submission of an application for development to the Pinelands Commission and receipt of application authorization. While this is not a formal permit, official approval is required prior to the commencement of any development activities.

Pinelands Commission Web site- <http://www.nj.gov/pinelands/>

4. Delaware River Basin Commission (DRBC)

- The DRBC was created as a result of an interstate compact among four states that border the Delaware River: New Jersey, New York, Pennsylvania, and Delaware.
- The purpose of the DRBC is to control pollution in the Delaware River, with each state agreeing to require treatment of industrial waste and sewage before its discharge into the Delaware River.
- The DRBC supersedes any state laws concerning the Delaware River Basin to the extent they are inconsistent with the goals and purposes of the DRBC.

See www.state.nj.us/drbc

5. Delaware and Raritan Canal Commission

Regulations at N.J.A.C. 7:45.

The Delaware and Raritan Canal stretches from New Brunswick southeast to Trenton and north from Trenton to Stockton, New Jersey. The Delaware and Raritan State Park Law created the Delaware and Raritan Canal Commission, whose function is to establish a review zone in which both state and private activities in or near the canal that may adversely affect the integrity of the canal would be reviewed by the Commission. Construction of any project is not permitted prior to obtaining a Certificate of Approval from the Commission.

Applications are reviewed by the Commission and decisions are rendered based upon four criteria: storm drainage and water quality impact; visual and natural quality impact including historic impact; stream corridor impact; and traffic impact.

See www.dandrccan.com/drcc

6. Highlands

- Regulations at N.J.A.C. 7:38.
- This chapter is authorized by N.J.S.A. 13:20-32 and establishes the environmental standards and procedures by which the Department shall review any application pursuant to the Highlands Water Protection and Planning Act Rules, N.J.S.A 13:20-1 et seq. (Highlands Act) for major Highlands development proposed in the preservation Area of the Highlands region, for a waiver from any requirement for a Highlands Preservation Area Approval, and any resource or applicability determination or exemption from the Act.

Highlands Council Web site - <http://www.highlands.state.nj.us/>

DEP Guidance for the Highlands Act - <http://www.nj.gov/dep/highlands/>

IX. NOISE

Regulations at N.J.A.C. 7:29

The legislature enacted the “Noise Control Act of 1971,” N.J.S.A. 13:1G-1 to -23, finding that the people of the State should be free from noise that unnecessarily degrades the quality of life. Noise levels in the State threatened the well-being of the people, and accordingly, directed that noise standards be adopted and enforced. See <http://www.nj.gov/dep/enforcement/noise-intro.html>

The NJDEP has promulgated Noise Control regulations at N.J.A.C. 7:29. The regulations establish noise standards of 50 decibels (continuous) during the night (10:00 p.m. to 7:00 a.m.) and 65 decibels (continuous) during the day. Impulsive sound exceeding 80 decibels may not be repeated more than four times per day.

Exceptions to these requirements include:

- agricultural activities;
- bells, chimes, or carillons used in conjunction with religious services;
- emergency energy release devices;
- National Warning System operations;
- aircraft and railroad operations;
- public roadways and public celebrations; and,
- normal operation of firearms; and use of explosive devices, which are regulated by the NJ Department of Labor.

The Noise Control Act allows municipalities to adopt noise control ordinances that are more stringent than the State regulations. The NJDEP has also adopted a Model Noise Ordinance that the municipalities may adopt. Noise complaints are not investigated by the NJDEP, which does not have its own noise bureau.

X. RADIATION

1. Radioactive Materials

Naturally occurring and accelerator produced radioactive material (NARM) is regulated by the New Jersey Department of Environmental Protection (DEP). The DEP derives its authority from the Radiation Protection Act (New Jersey Statutes Annotated Title 26:2 D), and its regulations are contained in the Radiation Protection Code (New Jersey Administrative Code Title 7 Chapter 28). Depending on the radionuclide, quantity, and the form, a license is required in order to manufacture, produce, transfer, receive, acquire, own, possess, store, or use NARM. Provided the license application is administratively complete, the DEP turnaround time is approximately 20 days. Radioactive materials license and registration applications can be found on-line at <http://www.state.nj.us/dep/rpp/rms/rmsdown.htm>.

New Jersey is not an Agreement State (any state with which the Atomic Energy Commission or the Nuclear Regulatory Commission has entered into an effective agreement under subsection 274b of the Act. Non-agreement State means any other State), therefore source, special nuclear or byproduct radioactive materials are regulated by the NRC. Requirements for compliance with NRC are found in Title 10 of the Federal Regulations (10 CFR). However, all source, special nuclear or byproduct radioactive materials for which a specific NRC license is issued must be registered with the DEP within 30 days after taking possession of the radioactive materials.

2. Machine Source Radiation

Radiation-producing equipment needs to be registered with the DEP through the Machine Source Section of the Bureau of Radiological Health (BRH). This notification must be made within 30 days of installation regardless of whether you own or lease the equipment. The Bureau must be notified within 30 days of moving or selling the equipment. Regulations can be found in N.J.A.C. 7:28 as well as the registration form. "REGISTRATION OF A RADIATION PRODUCING MACHINE" can be found on-line at <http://www.state.nj.us/dep/rpp/download.htm>.

Only a licensed physician or the holder of a license issued by the Bureau of Radiological Health may use x-rays in such a manner as to expose human beings. Licensing applicants must complete a course of study approved by the Radiologic Technology Board of Examiners or its equivalent as deemed by the Board and pass a Board approved examination. License candidates can obtain examination and license applications by contacting the Bureau or visiting the following web site: <http://www.nj.gov/dep/rpp/tec/index.htm>.

3. Non-Ionizing Radiation

The Nonionizing Radiation Section enforces the provisions of N.J.A.C. 7:28-42, Radio Frequency Radiation, which addresses public and occupational exposure to fixed (stationary) sources of radiofrequency radiation. Some of the greatest exposures occur during the operation of radiofrequency and microwave heaters, sealers and industrial ovens. Therefore, as per the requirements set forth in N.J.A.C. 7:28-48, Fees for the Registration of Nonionizing Radiation Producing Sources, owners of these sources must register with the Department within 30 days after taking possession of such sources. There is a registration fee, based on the number of sources at a facility and the frequency of the radiation utilized by the source. The amount of the fee is listed in Subchapter 48 and is assessed after the registration form is received and processed by the Department.

The Section also enforces N.J.A.C. 7:28-41, Mercury Vapor Lamps. This subchapter requires that the correct type of mercury vapor or metal halide bulbs be installed in the proper fixtures so that if a bulb is cracked or damaged, dangerous ultraviolet radiation is not emitted. Information can be found on-line at <http://www.nj.gov/dep/rpp/nrs/index.htm>.

4. Radon Testing and Mitigations

Certification by the DEP through the Radon Section of the Bureau of Environmental Radiation is required to conduct radon testing and mitigation in New Jersey. Information and applications can be found on-line at <http://www.nj.gov/dep/rpp/radon/index.htm>

XI. HISTORIC PROPERTY

The New Jersey Register of Historic Places Act – Regulations at N.J.A.C. 7.4

Project review procedures under the New Jersey Register of Historic Places Act (N.J.S.A. 13:1B-15.128) were established to ensure that historic and archaeological properties listed in the New Jersey Register of Historic Places are protected from impacts associated with public actions by state, county, and local governmental entities, or on their behalf, their lessees or agents. Public projects that may encroach upon New Jersey Register listed properties must have prior authorization. NJDEP's Historic Preservation Office (HPO) administers the Act's review procedures with public input, and serves as staff to the New Jersey Historic Sites Council (HSC).

Examples of undertakings requiring New Jersey Register authorization include: rehabilitations, alterations, demolitions, relocations, acquisitions, sales, leases, transfers of deed, and easements. The following examples would not be considered undertakings: changes in local zoning, issuance of building or demolition permits to private entities, and routine maintenance.

Encroachments are those undertakings that adversely affect listed properties. An effect occurs when an undertaking directly or indirectly impacts the historic characteristics for which a property is listed in the New Jersey Register. When such effects adversely impact the property, and therefore do not meet the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties, the project is considered an encroachment. Examples of encroachments include demolition of a contributing resource in a historic district, the taking of property from a historic resource, the alteration of key character-defining elements of a listed property, and introduction of visual and other ambient impacts out of character with the historic property.

The procedures implementing review under the New Jersey Register of Historic Places Act are outlined in N.J.A.C. 7:4, and consist of: 1) submission of Applications for Project Authorization; 2) HPO review for determinations of Encroachment or No Encroachment; 3) Review by the HSC for projects determined to be Encroachments (projects that do not constitute encroachments are approved administratively); and 4) final action on each by the Commissioner based on HPO and HSC recommendations.

For more information on the Act including the full text of the Act, associated regulations, and review procedures, as well as the application form and instructions, please visit the HPO web site at www.state.nj.us/dep/hpo.

Section 106 of the National Historic Preservation Act

The National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470f, requires federal agencies to take the effects of their undertakings on historic and archaeological properties into account in project planning and implementation. This process is commonly referred to as the "Section 106" review process. The HPO assists federal agencies in identifying historic and archaeological properties and avoiding or minimizing potential adverse effects from federally funded, licensed, or authorized projects in New Jersey. Section 106 is administered nationally by the Advisory Council on Historic Preservation, which must be provided with an opportunity to comment on federally involved undertakings.

For more information on Section 106 of the National Historic Preservation Act including: 36 CFR Part 800: Protection of Historic Properties, the Section 106 Users Guide, and Protecting Historic Properties: A Citizens Guide to Section 106 Review, please visit the HPO web site at www.state.nj.us/dep/hpo.

Other Historic Property Reviews

The HPO provides advice and comment regarding historic and archaeological properties for a number of permitting programs within the Department of Environmental Protection, including the Land Use Regulation Program's Coastal Area Facilities Review Act, the Waterfront Development Act, and the Freshwater Wetlands Protection Act. For more information on these programs please visit the Land Use Regulation web site <http://www.state.nj.us/dep/landuse/>.

Other NJDEP programs that consider the potential for project impacts to historic and archaeological properties include the Highlands Water Protection and Planning Act (please see <http://www.nj.gov/dep/highlands/> for additional information including an interactive map of the Highlands Region) and Executive Order # 215 of 1989. (Please see <http://www.nj.gov/dep/opppc/reports/exec215.pdf> for guidelines on preparation of Environmental Assessments and Environmental Impact Statements under Executive Order # 215).

While Executive Order # 215 review is limited to undertakings of departments, agencies and authorities of the State, the Coastal Area Facilities Review Act, the Waterfront Development Act, the Freshwater Wetlands Protection Act, and the Highlands Water Protection and Planning Act apply to *both* public and private undertakings.

Technical Assistance

New Jersey's Historic Preservation Office, located within the Department of Environmental Protection, brings expertise in a variety of fields essential to preserving historic resources. HPO professional staff possess expertise in history and historic research; architecture and architectural history; historic, prehistoric, and maritime archaeology; planning; historic landscapes; tax incentives, marketing and outreach for historic properties. In addition to project reviews, HPO staff responds to more than 40,000 calls yearly from people working to preserve, protect and promote New Jersey's historic resources. Whether you are interested in establishing a local historic district, nominating a building to the New Jersey and National Registers of Historic Places, restoring your house, learning more about HPO's technical reviews and guidelines, or investigating tax incentives available for qualified historic rehabilitation projects, you will find information and guidance on the HPO web site <http://www.state.nj.us/dep/hpo/> or by contacting the Office at 609-292-2023.

APPENDIX A

ACRONYM	ACRONYM MEANING
ACO	Administrative Consent Order
AOC	Areas Of Concern
BMP	Best Management Practices
BOD	Biological Oxygen Demand
BPU	Board of Public Utilities
CAFRA	Coastal Area Facility Review Act
CAS	Chemistry Abstract Service
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO2	Carbon Dioxide
COD	Chemical Oxygen Demand
DCR	Discharge Cleanup and Removal
DEQ 114	NJ Release and Pollution Prevention Report known as a DEQ 114
DGW	Discharge to Groundwater
DOT	Department of Transportation
DPCC	Discharge Prevention, Containment and Countermeasure
DRBC	Delaware River Basin Commission
DSW	Discharge to Surface Water
ECRA	Environmental Cleanup Responsibility Act
EHS	Extraordinarily Hazardous Substances
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ER	Emergency Response
ERC	Emission Reduction Credits
FRP	Facility Response Plan
GIN	General Information Notice
GPD	Gallons Per Day
HAP	Hazardous Air Pollutants
IPP	Industrial Pretreatment Program
ISRA	Industrial Site Recovery Act
LAER	Lowest Achievable Emission Rate
LNA	Letters of Non-Applicability
LOI	Letter Of Interpretation
LQG	Large Quantity Generator
MACT	Maximum Achievable Control Technology

ACRONYM	ACRONYM MEANING
MEG	Maximum Emergency Generation-A period in which one or more electric generating units are operated at emergency capacity at the direction of the load dispatcher, in order to prevent or mitigate voltage reductions or interruptions in electric service, or both.
MOA	Memorandum Of Agreement
MOU	Memorandum of Understanding
MRF	Material Recovery Facility
MSDS	Material Safety Data Sheet
NAICS	North American Industry Classification System
NARM	Naturally occurring and Accelerated Radioactive Materials
NFA	No Further Action
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
N.J.S.A.	New Jersey Statutes Annotated
NJPDES	New Jersey Pollutant Discharge Elimination System
NOX	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
OPPT	Office of Pollution Prevention and Toxics
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyls
PM-10	A class of air contaminants equal to a nominal 10 micrometers.
POTW	Publicly Owned Treatment Works
PSD	PREVENTION OF SIGNIFICANT DETERIORATION
PTE	Potential To Emit
RA	Remediation Agreement
RACT	Reasonably Available Control Technology
RAR	Remedial Action Report
RAW	Remedial Action Workplan
RCRA	Resource Conservation and Recovery Act
RFA	Request For Authorization
RI	Remedial Investigation
RIW	Remedial Investigation Workplan
RMP	Risk Management Plan
RPPR	Release and Pollution Prevention Report
SARA	Superfund Amendments and Reauthorization Act
SI	Site Investigation
SIC	Standard Industrial Classification
SIU	Significant Industrial User
SO2	Sulfur Dioxide
SOTA	State Of The Art

ACRONYM	ACRONYM MEANING
SPCC	Spill Prevention Control and Countermeasure
SQG	Small Quantity Generator
SQH	Small Quantity Handlers
TCLP	Toxicity Characteristic Leaching Procedure
TCPA	Toxic Catastrophe Prevention Act
TPY	Tons Per Year
TRI	Toxic Release Inventory
TRSN	Trade Registry Secret Number
TSCA	Toxic Substances Control Act
TSD	Treatment/Storage/Disposal
TSP	Total suspended particulate matter
TWA	Treatment Works Approval
TXS	Toxic substance
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WQM	Water Quality Management

Disclaimer

The reader is cautioned that this Digest is only a guide and is not intended to provide legal advice. Consultation with an attorney versed in environmental law is recommended when confronted with environmental legal issues.

APPENDIX B

Web sites

Web addresses are subject to change. This list is correct as of the date of publication however, should the web address change, use the search engine in either the EPA or NJDEP home page to obtain the current address. The topic list is in alphabetical order.

Air (NJ and EPA)

www.epa.gov/region02/air
www.nj.gov/dep/infofinder/topics/air.htm
<http://www.nj.gov/dep/aqpp/>

Coastal Area Facility Review Act (NJ)

<http://www.state.nj.us/dep/landuse/coast.html>

Coastal Management Program (NJ)

<http://www.nj.gov/dep/cmp/index.html>

Community Right To Know (NJ and EPA)

<http://www.epa.gov/region5/defs/html/epcra.htm>
www.epa.gov/ncepihom
<http://www.nj.gov/dep/opppc/crtk/index.html>

Dam Safety (NJ)

www.nj.gov/dep/damsafety/

Delaware and Raritan Canal Commission (NJ)

www.dandrcanal.com/drcc

Delaware River Basin Commission (NJ)

www.state.nj.us/drbc

Highlands Act (DEP Guidance) (NJ)

<http://www.nj.gov/dep/highlands/>

Highlands Council Web site (NJ)

<http://www.highlands.state.nj.us/>

Historic Property (NJ)

www.state.nj.us/dep/hpo

Industrial Site Recovery Act (NJ)

www.state.nj.us/dep/srp/isra

Land Use Program (NJ)

www.nj.gov/dep/landuse/

New Jersey DEP Phone Directory

<http://www.nj.gov/dep/easyaccess>

New Jersey Discharge Prevention, Containment and Countermeasure

<http://www.nj.gov/dep/rpp/brp/index.htm>

New Jersey Division of Water Quality Web site

<http://www.state.nj.us/dep/dwq/index.html>

New Jersey Meadowlands Commission

www.hmdc.state.nj.us

New Jersey Pollutant Discharge Elimination System

www.nj.gov/dep/dwq/

<http://www.state.nj.us/dep/dwq/forms.htm#dswforms>

Noise (NJ)

<http://www.nj.gov/dep/enforcement/noise-intro.html>

Permitting and Technical Information for DWQ (NJ)

<http://www.state.nj.us/dep/dwq/permitng.htm>

Pesticides (NJ)

www.nj.gov/dep/enforcement/pcp

Pinelands Commission Web site (NJ)

<http://www.nj.gov/pinelands/>

Radiation (NJ)

www.state.nj.us/dep/rpp

Site Remediation Program (NJ)

www.nj.gov/dep/srp

Spill Compensation and Control Act (NJ)

<http://www.nj.gov/dep/rpp/brp/index.htm>

Spill Prevention Control and Countermeasure Plans (EPA)

<http://www.epa.gov/oilspill/frps/index.htm>

Stormwater (NJ)

www.state.nj.us/dep/dwq/nonpoint.htm

<http://www.state.nj.us/dep/dwq/stormw.htm>

Stream Encroachment (NJ)

www.nj.gov/dep/landuse/se/se.html

Toxic Catastrophe Prevention Act (NJ)

<http://www.nj.gov/dep/rpp/tcpa/>

Toxic Substance Control Act (EPA)

www.epa.gov/region5/defs/html/tsca.htm

<http://www.epa.gov/oppts>

<http://www.epa.gov/opptintr/pubs/opptabt.htm>

Underground Storage Tanks (NJ)

<http://www.nj.gov/dep/srp/bust/>

Waste, Hazardous, Solid, Universal (NJ)

www.nj.gov/dep/dshw/

Water Supply (NJ)

<http://www.state.nj.us/dep/watersupply/index.html>

Wetlands (NJ and EPA)

www.epa.gov/owow/wetlands/index.html

www.nj.gov/dep/landuse/fww/fww.html

Disclaimer

The reader is cautioned that this Digest is only a guide and is not intended to provide legal advice. Consultation with an attorney versed in environmental law is recommended when confronted with environmental legal issues.

APPENDIX C

Bibliography

ISRA Compliance: Environmental Issues in Transactions and Brownfield Redevelopment (5th Ed., 2003), David B. Farer, Esq., featuring chapters by Jorge Berkowitz and Ann Waeger, Esq., New Jersey Institute of Continuing Legal Education.

New Jersey Administrative Code, Title 7, Environment.

New Jersey Environmental Law (4th Ed., 1999), Lewis Goldshore, Esq. and Marsha Wolf, Esq., New Jersey Institute of Continuing Legal Education.

New Jersey Environmental Law Cimator (2nd Ed., 1999), Lewis Goldshore, Esq. and Marsha Wolf, Esq., New Jersey Institute of Continuing Legal Education.

New Jersey Environmental Law Handbook (6th Ed., 2001), Lowenstein Sandler PC, Government Institutes (www.govinst.com).

North American Industrial Classification System Manual, 2002, Office of Management and Budget, Economic Classification Policy Committee and printed by the National Technical Information Service (see www.naics.com).

Standard Industrial Classification Manual, 1987, Executive Office of the President, Office of Management and Budget.

Disclaimer

The reader is cautioned that this Digest is only a guide and is not intended to provide legal advice. Consultation with an attorney versed in environmental law is recommended when confronted with environmental legal issues.

NJBIA

The **New Jersey Business & Industry Association** is the nation's largest state-level employer association, with more than 23,000 member companies. NJBIA represents the business community before the State Legislature and State agencies. The Association also keeps its members informed about State and federal regulations and provides detailed information on relevant business topics through regular seminars and conferences.

Members receive a wealth of information from NJBIA newsletters and the Association's flagship publication, *New Jersey Business Magazine*. Members also enjoy discount prices for NJBIA seminars, special publications and other services.

For more information about the Association,
call NJBIA's Member Services Department at 609-393-7707, ext. 238, or visit
www.njbia.org.



The Magazine of the New Jersey Business & Industry Association