North Atlantic
Energy Service Corporation

P.O. Box 300
Seabrook, NH 03874
Telephone (603) 474-9521
Facsimile (603) 474-2987

Ted C. Feigenbaum
Senior Vice President and
Chief Nuclear Officer

NYN- 93152

October 28, 1993

United States Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

References: (a) Facility Operating License No. NPF-86, Docket No. 50-443

(b) National Pollutant Discharge Elimination System (NPDES) Permit No. NH0020338

Subject: Renewal of NPDES Permit No. NH0020338

Gentlemen:

The United States Environmental Protection Agency (EPA) has renewed NPDES Permit No. NH0020338 issued to North Atlantic Energy Service Corporation for the operation of Seabrook Station. The NPDES Permit was renewed on September 30, 1993 and is effective on October 30, 1993. A copy of the NPDES Permit and the certification by the State of New Hampshire are provided in Enclosure 1. This notification is provided pursuant to Section 3.2 of the Environmental Protection Plan (Nonradiological).

Should you have any questions regarding this matter, please contact Mr. James M. Peschel, Regulatory Compliance Manager, at (603) 474-9521, extension 3772.

Very truly yours,

Ted C. Feigenbaum

TCF:ALL/sm

Enclosure

010049

A001
1/1

cc: Mr. Thomas T. Martin
Regional Administrator
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Mr. Albert W. De Agazio, Sr. Project Manager
Project Directorate I-4
Division of Reactor Projects
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. Noel Dudley
NRC Senior Resident Inspector
P.O. Box 1149
Seabrook, NH 03874

North Atlantic
October 28, 1993

ENCLOSURE 1 TO NYN-93152

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 1, 1993

T. C. Feigenbaum, President
North Atlantic Energy Service Corporation
P. O. Box 300
Seabrook, New Hampshire 03874

Re: Permit Issuance, Seabrook Station
NPDES Application No. NH0020338

Dear Mr. Feigenbaum:

Enclosed is your final National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to the Clean Water Act (the "Federal Act"), as amended. The Environmental Permit Regulations, at 40 C.F.R. §124.15, require this permit to become effective on the date specified in the permit.

Also enclosed is a copy of the Agency's response to the comments received on the draft permit and information relative to hearing requests and stays of NPDES permits.

We appreciate your cooperation throughout the development of this permit. Should you have any questions concerning the permit, feel free to contact T. Landry of my staff at 617/565-3508.

Sincerely,

Clyde 7. Shufelt for

Edward K. McSweeney, Chief
Wastewater Management Branch

Enclosures

cc: NH DES, Attn: Dr. Edward J. Schmidt
All Interested Parties

NH20338.FIN

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. Sections 1251 et seq.; the "CWA"),

North Atlantic Energy Service Corporation
P.O. Box 300
Seabrook, NH 03874

is authorized to discharge from a facility located at

North Atlantic Energy Service Corporation
Seabrook Station
Route 1
Seabrook, NH

to receiving water named

Atlantic Ocean and Browns River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective (30) thirty days from the date of issuance.

This permit and the authorization to discharge expire at midnight, five years from the effective date.

This permit supersedes the permit issued on July 26, 1985.

This permit consists of 25 pages in Part I including effluent limitations, monitoring requirements, etc., 19 pages in Part II including General Conditions and Definitions, 11 pages in Attachment A and 15 pages in Attachment B.

Signed this 30th day of September, 1993

David A. Fierra

Director
Water Management Division
Environmental Protection Agency
Boston, MA

REGION I

Part I

A. Effluent Limitations and Monitoring Requirements

1. Except as specified in Paragraphs 1 through 10 herein, the permittee shall not discharge to the Atlantic Ocean or to the Browns River, a final effluent to which it has added any pollutants.

a. Chlorine may be used as a biocide. No other biocide shall be used without explicit approval from the Regional Administrator and the Director, Par.I.A.1.f.

b. Total Residual Oxidant (Chlorine) concentration, unless otherwise specified, shall be measured downstream of the unit or units being chlorinated before that stream mixes with the receiving water. The total oxidant or chlorine residual of the effluent shall not result in any demonstrable harm to aquatic life or violate any water quality standard which has been promulgated.

c. The discharges shall not jeopardize any Class B use of the receiving waters and shall not violate applicable water quality standards for Class B water as defined by the State of New Hampshire.

d. The permittee shall not at any time, either alone or in conjunction with any person or persons, cause directly or indirectly, the discharge of any waste into the receiving waters except waste that has been treated in such a manner as will not lower the Class B quality or interfere with the uses assigned to said waters by the New Hampshire Legislature (Chapter 311, Laws of 1967).

e. This permit shall be modified, revoked or reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b) (2), and 307(a) (2) of the CWA, if the effluent standard or limitation so issued or approved:

(1) contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or

(2) controls any pollutant not limited by this permit.

If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the CWA.

f. The term "Regional Administrator" means the Regional Administrator of Region I of the U.S. Environmental Protection Agency, or his designee, and the term "Director" means the Director of the Water Supply and Pollution Control Division of the New Hampshire Department of Environmental Services or his designee.

g. There shall be no discharge of polychlorinated biphenyl compounds such as commonly used for transformer fluid.

h. The measurable thermal plumes from the Seabrook Station shall: (a) not block zones of fish passage, (b) not interfere with spawning of indigenous populations, (c) not change the balanced indigenous population of the receiving water, and (d) not contact surrounding shorelines.

i. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Administrator as soon as they know or have reason to believe (40 C.F.R. 122.42):

(1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

(a) One hundred micrograms per liter (100 ug/l);

(b) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. Section 122.21(g)(7); or

(d) Any other notification level established by the Regional Administrator in accordance with 40 C.F.R. Section 122.44(f).

(2) That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

(a) Five hundred micrograms per liter (500 ug/l);

(b) One milligram per liter (1 mg/l) for antimony;

(c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. Section 122.21(g) (7); or

(d) Any other notification level established by the Director in accordance with 40 C.F.R. Section 122.44(f).

(3) That they have begun or expect to begin to use or manufacture as an intermediate or final product or by product any toxic pollutant which was not reported in the permit application.

j. The thermal component of the discharge shall in all aspects be in accordance with the discharge described in the permittee's NPDES Permit Application No. NH0020338, dated August 1, 1974, as modified in the reapplication dated April 5, 1991, except as specifically modified below.

(1) The permittee shall perform back-flushing (cooling water flow reversal for bio-fouling control) only during times when hydrological and meteorological conditions are such that the plume flows off-shore and/or temperature increases are minimized at the Outer Sunk Rocks. The permittee shall notify the Regional Administrator and the Director 15 calendar days before each back-flushing operation is initiated.

(2) The thermal component of the discharge from the Seabrook Station shall not cause a temperature rise of more than 5.0 °F in the "near-field jet mixing region". The 5 °F limit shall apply only at the surface of the receiving waters. For the purposes of this paragraph the "near-field jet mixing region" means that portion of the receiving waters within 300 feet of the submerged diffuser in the direction of discharge. This paragraph shall apply only to temperature rises to the extent caused by the addition of heat to the receiving waters by the permittee. This temperature requirement does not apply during the cooling water flow reversal (thermal backflushing) used for biological control.

(3) During operation of Seabrook Station, the permittee shall conduct such additional studies as are determined by the Regional Administrator and the Director to be necessary to evaluate the accuracy of the thermal plume predictions it has submitted to EPA in support of the NPDES Permit Application No. NH0020338 for both normal operation and thermal back-flushing operations. These thermal plume verification submittals shall be in accordance with Paragraph I.A.11.g of this permit.

(4) During operation of Seabrook Station, the permittee shall conduct such studies as are determined by the Regional Administrator and the Director to be necessary to continuously monitor and evaluate the effect of the Seabrook Station on the balanced, indigenous population of shellfish, fish and wildlife in and on the body of water into which the discharge is made. The proposed plan submittal shall be in accordance with Paragraph I.A.11 of this permit.

(5) NPDES Permits issued from time to time in regard to the discharges from Seabrook Station will contain such further limitations or be modified to contain such further limitations on the thermal component of the discharge as the results of the above studies and other available information indicate to

be necessary to assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on the receiving waters.

(6) The effluent limitations of this permit shall apply to all thermal components of the discharge from the Seabrook Station, including but not limited to discharge during normal station operation and discharge during cooling water flow reversal for bio-fouling control.

(7) The permittee has coated the external surfaces of the diffuser with a material approved by the Regional Administrator and the Director that would discourage the growth of marine organisms on the diffuser which might attract browsing fish which would then be susceptible to entrapment during the reversed flow back-flushing operation. The permittee may propose alternate chemicals or methods for minimizing biological growth on the diffuser nozzles to the Regional Administrator and the Director for approval.

(8) The permittee shall provide a study that will evaluate the alternatives for thermal backflushing. This analysis shall consider the environmental impact and technical feasability of each alternative including seasonal impacts on fish migration and spawning; endangered species; initial dilution; and plume dispersion.

Should the thermal backflushing procedure be selected as the final alternative, then the present thermal backflushing report shall be expanded to include the additional data requested the above. This report defines the hydrological and meteorological conditions that would minimize the thermal impact on the biologically rich Sunk Rocks was developed under requirements of the 1985 permit, Par. I.A.1.n.(1).

This study shall be submitted to EPA, the State and the TAC before the selected alternative is used to control the sessile organisms in the Intake Tunnel or by January 1, 1995, whichever comes first.

k. The design, construction and capacity of all components of the cooling water System seaward of the inlets to the main condensers or other heat exchangers, as appropriate, of the Seabrook Station (the "Cooling Water Intake Structures") shall in all respects be in accordance with NPDES Permit Application No. NH0020338, as submitted on August 1, 1974, and the permittee's Application for a Permit to Discharge or Work in Navigable Waters and their Tributaries, submitted to the Corps of Engineers by letter of October 25, 1974 except as Specifically modified below:

(1) The Cooling Water Intake Structure shall have three intake ports.

(2) The permittee shall use an anti-fouling protective coating on the Cooling Water Intake Structures. The multiport diffuser shall be maintained free of marine fouling organisms. (The objective of this paragraph is to discourage the growth of organisms which might attract browsing fish which then would be susceptible to entrapment, Par. I.A.1.j.7 above).

(3) The velocity of water as it enters the Cooling Water Intake Structures shall at no time exceed 1.0 foot per second.

(4) The Cooling Water Intake Structures shall incorporate such behavioral or other non-structural deterrents and barriers as the Regional Administrator and/or the Director determines to be appropriate under Section 316(b) of the Clean Water Act after reviewing the results of any permittee conducted studies and any other information available.

(5) NPDES Permits issued from time to time in regard to the Cooling Water Intake Structures for the Seabrook Station will contain such further limitations and requirements or be modified to contain such further limitations and requirements as the results of any studies by the permittee and other available information indicate to be necessary to minimize adverse environmental impact from the Cooling Water Intake Structures.

l. It has been determined that the Cooling Water Intake Structures presently designed employ the best technology available for minimizing adverse environmental impact. No change in the location, design or capacity of the present structures can be made without prior approval of the Regional Administrator and the Director. The present design shall be reviewed for conformity to regulations pursuant to Section 316(b) when such are promulgated.

m. Should the intake tunnel and/or discharge tunnel require dewatering during an emergency condition, the permittee shall submit to the Regional Administrator and the Director an Emergency Dewatering Plan for their approvals as required in Paragraphs II.B.4 and II.B.5 of this permit which define "Bypass" and "Upset" operating conditions.

n. For this permit, the "Diversion Date" is defined as the date that Discharge 002 to Browns River is terminated and all point sources to the Browns River cease. The combined flow of the treated sanitary wastewater and the plant storm water runoff, Discharge 002, will be "diverted" from the Browns River to the Circulating Water System into the Discharge Tunnel, Discharge 001, through a new manhole. For the purposes of this permit, this combined stream will continue to be designated as Discharge 002 for reporting purposes.

The permittee shall notify the Regional Administrator and the Director at least 30 days prior:

(1) to initial introduction of any Sanitary Wastewater, or storm water into the discharge tunnel and

(2) to the "Diversion Date" when all discharges into the Browns River have been terminated.

It is understood that these two dates may not be concurrent when decomissioning the basin.

o. The following chemicals are approved for water discharge. These discharge levels may not be increased nor chemicals substituted without written approval by the Regional Administrator and the Director or their designees. The permittee must demonstrate that the aquatic toxicity of the proposed changes are equal to or less than approved chemicals herein listed.

Product	Calculated Maximum Discharge #001 Concentration, ppm	Plant Water System
Hydrazine	0.5	Secondary Steam System
Ammonia	0.5	Secondary Steam System
Boron	5	Primary System
Lithium Hydroxide	0.5	Primary System
Hydrogen Peroxide	0.5	Primary System
Ethylene Glycol	50	Exterior Heating/Cooling System
Propylene Glycol	50	Same as Ethylene Glycol
Bulab 9328	0.4	Corrosion protection for fresh water systems
Bulab 6002	20	Biocide in cooling tower
Cat Floc TL	0.1	Liquid Radwaste System. To facilitate the removal materials made radio-active by neutron radiation in primary system
Cat Floc L	0.1	Same as Cat Floc TL
Nalcolyte 7134	0.1	Same as Cat Floc TL
Sodium Nitrite	0.5	Heating/Cooling Systems
Sodium Molybdate	0.5	Heating/Cooling Systems
Sodium Silicate	5	Auxiliary Secondary System Scale Inhibitor
Morpholine	0.1	Steam Generators
Ethanolamine	0.5	Secondary Steam System
Flocon	0.01	Sequestering Agent

2. During the period beginning the Effective Date and lasting through Expiration Date, the permittee is authorized to discharge from outfall(s) serial number(s) 001, Circulating Water System Discharge (A combination of all Seabrook Station waste water streams: Condenser Cooling Water, Service Water System, Liquid Waste Distillate, Steam Generator Blowdown, Cooling Tower Blowdown, Demineralizer Waste, Secondary Plant Leakage, Treated Sanitary Wastes, and Storm Water Runoff).

   a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency	Sample Type
Flow, MGD	Report	Report	Continuous*	Estimate
Temperature Rise, (Delta-T), °F**	39	41	Hourly	Hourly Avg.
Temperature (Maximum), °F	Report	Report	Hourly	Hourly Avg.
Total Residual Oxidants (TRO), mg/l	0.15	0.20	1/day***	Grab
pH, s.u.	6.5	8.0	1/day***	Grab

* The flow rate may be estimated from pump capacity curves.

** Temperature Rise is the difference between the Discharge Temperature (Discharge Transition Structure) and Intake Temperature (Intake Transition Stricture). The intake and discharge temperatures will recorded by instruments or computers. The Temperature Rise and Maximum Temperature shall be calculated as a hourly average based upon at least twelve (12 times) per hour. These hourly average values will then be reported in the monthly DMRs.

*** Samples to be taken once per day at approximately the same time period. See Subparagraph "e" below for additional TRO requirements.

   b. The pH of the discharge shall not be less than 6.5 standard units nor greater than 8.0 standard units or as naturally occurs in the receiving waters, Par. I.F.1.a. The pH of the marine waters at the Intake Transition Structure shall be considered as the receiving water pH for this permit.

c. There shall be no visible discharge of oil sheen, foam, or floating solids in the vicinity of the diffuser ports. Naturally occurring sea foam in the discharge transition structure is allowed. Except in cases of condenser leak seeking and sealing, use of a reasonable amount of biodegradable and non-toxic material may be used to the extent necessary to locate and/or seal any condenser leak. The permittee shall report in the appropriate monthly DMR the occasions wherein this material was used giving the date(s) of the incident, the type of materials used and the amount of materials discharged.

d. The temperature of the discharge at Discharge Transition Structure shall not exceed an Average Monthly of 39 ^{o}F or Maximum Daily of 41 ^{o}F rise over the temperature of the intake. The Monthly Average and Maximum Daily temperatures shall be reported without limit. The temperatures shall be based upon a one-hour average temperature at the intake and discharge.

e. The Total Residual Oxidant (TRO) concentration shall not exceed 0.20 mg/l at any time the Discharge Transition Structure.

f. Total Residual Oxidant Concentration shall be measured in the Discharge Transition Structure.

Total Residual Oxidants shall be tested using the Amperometric Titration Method, Method 4500-CL E in Standard Methods for the Examination of Water and Wastewater, 17th Edition dated 1989 or Method 330.1 in the EPA Manual of Methods of Analysis of Water and Wastes .

For this permit the Minimum Level (ML) [the minimum practical detection level] for Total Residual Oxidants has been defined as 0.05 mg/l (50 ug/l) and that value may be reduced as more sensitive test methods are approved by the EPA and the State.

g. Samples taken in compliance with the monitoring requirements above shall be taken at the Discharge Transition Structure prior to the cooling water entering the discharge tunnel.

h. The permittee shall submit annually a Chlorine Minimization Report to the Regional Administrator and the Director as a component of the annual biological and hydrological report, Par. I.A.11 below. The objective of this chlorination report is to continue minimizing the usage of chlorine consistent with maintaining a suitable biofouling control of the intake cooling water system and maintaining a high condenser efficiency. The Chlorine Minimization Report should include as a minimum:

(1) The seasonal chlorination cycle employed during the reporting period: the days the system was chlorinated, the sodium hypochlorite dosage level, the experimentally determined marine water chlorine demand, the TRO reported in the Discharge Transition Structure, the report on the biological monitoring plates in the Intake cooling water system, and the results of any inspections of the Intake Structures by divers or robots.

(2) Annually, the permittee may propose long-term changes in the chlorination seasonal dosage rates. These proposed changes with their justification are to be included in the annual review of the biological and hydrological data by the Technical Advisory Committee (TAC), Par. I.A.11.b below. The proposed chlorination plan shall be implemented only after the acceptance by the TAC and approval of the Regional Administrator and the Director.

The permittee may propose changes in the approved seasonal chlorination rates to the Regional Administrator and the Director at any time to accommodate sudden changes in the biological activity of the marine waters which may immediately affect plant condenser efficiency or the Cooling Water System biological fouling. At no time shall the concentration of TRO exceed 0.20 mg/l at the Discharge Transition Structure, Par. I.A.2.a.

(3) The permittee shall report on the likelihood that the thermal backflushing operation will be needed to compliment the continuous chlorination program in the ensuing year (frequency and reason for the backflushing).

(4) The data developed for this report shall be incorporated into the statistical hydrological and biological data base for future operational data comparison.

i. All material removed from the rotating screens in the cooling water intake system shall not be returned to the receiving waters.

j. The discharge of radioactive materials shall be in accordance with the Nuclear Regulatory Commission requirements (10 CFR 20 and the Seabrook Station Technical Specifications).

k. The permittee shall conduct a Thermal, Biological, Hydrological and Chlorination Monitoring Program in accordance with Paragraphs I.A.1.j, I.A.2.h, and I.A.10.

1. The permittee shall perform chronic toxicity tests following the protocol in Attachment A (dated July 1991) on 24-hour composite effluent samples collected during January 1994 and July 1994. The species for this test is the Inland Silverside (Menidia beryllina). Chronic and acute toxicity data shall be reported as required in Attachment A. Results of these toxicity tests are to be submmitted as follows: January sampling results due by June 15th and the July sampling results due by September 15th. This permit shall be modified, or alternatively, revoked and reissued to incorporate additional toxicity testing requirement and to include limits if the results of these toxicity tests indicate this discharge causes an exceedance of any water quality criteria.

Part I

3. During the period beginning the Effective Date and lasting through the Diversion Date*, the permittee is authorized to discharge from outfall(s) serial number(s) 002A, Settling Basin Discharge (Combined flow of: storm water runoff and treated sanitary waste).

a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency	Sample Type
Flow, MGD	Report	41.5	Continuous	Recorder
Total Suspended Solids, mg/1	30	100	Weekly	Grab
Oil and Grease, mg/1	15	20	Weekly	Grab
Total Residual Chlorine, TRC, mg/1**	0.0075	0.013	Weekly	Grab
pH, s.u.	6.5	8.0	1/day	Grab

* The "Diversion Date" is the date that Discharge 002A to the Browns River is terminated and all point sources to the Browns River cease. See Paragraph I.A.1.n. The diverted combined stream of treated sanitary wastes and storm water will be designated as Discharge 002B and will be sampled prior to entering the Circulating Water System.

** Total Residual Chlorine shall be tested using the Amperometric Titration Method, Method 4500-CL E in Standard Methods for the Examination of Water and Wastewater, 17th Edition dated 1989 or Method 330.5 in the EPA Manual of Methods of Analysis of Water and Wastes. Any TRO value below 0.05 mg/l or 50 ug/l will be reported as a non-detect. For this permit the Minimum Level (ML) [the minimum practical detection level] for Total Residual Oxidants has been defined as 0.05 mg/l (50 ug/l) and that value may be reduced as more sensitive test methods are approved by the EPA and the State.

b. The pH shall not be less than 6.5 standard units nor greater than 8.0 standard units or as naturally occurs in the receiving waters, Par. I.F.1.a. The pH shall be monitored daily by a grab sample.

c. There shall be no visible discharge of floating solids or foam.

d. Samples taken in compliance with the monitoring requirements above shall be taken: before Diversion Date at the point of discharge into the Browns River.

Part I

4. During the period beginning the Diversion Date* and lasting through the Expiration Date, the permittee is authorized to discharge from outfall(s) serial number(s) 002B, Junction Box Wet Weather Discharge (Combined flow of: storm water runoff during a storm event, treated sanitary waste and secondary plant leakage).

   a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency	Sample Type
Flow, MGD	--	41.5	2/Annually**	Estimate (2-year 24-hour storm)
Total Suspended Solids, mg/l	30	100	2/Annually	Grab
Oil and Grease, mg/l	15	20	2/Annually	Grab

   * The "Diversion Date" is the date that Discharge 002A to the Browns River is terminated and all point sources to the Browns River cease. See Paragraph I.A.1.n. The diverted combined stream of treated sanitary wastes and storm water will be designated as Discharge 002B and will be sampled prior to entering the Circulating Water System.

   ** Wet weather samples shall be taken twice each year during the 1st hour of a significant storm event in the months of April and October or in the succeeding months should no significant storm events occur during the designated months. All storm water runoff samples will be collected from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. (Note: 1 inch storm event runoff is approximately 1 million gallons of water from the plant site.)

   b. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units or as naturally occurs due to acid rain, etc. The pH shall be monitored twice annually by a grab sample.

   c. Samples taken in compliance with the monitoring requirements above shall be taken after the Diversion Date at the point of discharge into Circulating Water System.

Part I

5. During the period beginning Effective Date and lasting through Expiration Date, the permittee is authorized to discharge from outfall(s) serial number(s) 021, Treated Sanitary Waste.

a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency*	Sample Type
Flow, gpd	Report	--	50,000	Continuous	Recorder
BOD, mg/1	30	--	50	Weekly	Grab
TSS, mg/1	30	--	50	Weekly	Grab
Total Residual Chlorine, mg/1	--	--	5.0	Daily when in use	Grab
Oil and Grease Observation	No Sheen Visible			Daily	Observation
Total Coliform, #/100 ml	70	--	70	3/Week	Grab
Total Metals, Sludge, mg/l**	--	--	--	Upon Disposal**	Grab
pH, s.u. (range)	6.5 to 8.0			Daily	Grab

* Samples will be taken when the treatment plant is operation since this facility is typically operated on a 5 day/week basis.
** See Paragraph I. C. for details defining sludge sampling, analysis, and reporting.

b. The pH shall not be less than 6.5 standard units nor greater than 8.0 standard units or as naturally occurs in the receiving waters, Par. I.F.1.a. The pH shall be monitored daily by a grab sample.
c. There shall be no discharge of floating solids or visible foam.
d. Samples are taken in compliance with the monitoring requirements specified above shall be taken at any representative point prior to mixing with any other stream: (1) into the primary settling basin prior to Diversion Date and (2) into the Circulating Cooling Water Discharge Tunnel, Discharge 001, after Diversion Date.

Part I

6. During the period beginning Effective Date and lasting through Expiration Date, the permittee is authorized to discharge from outfall(s) serials number(s) 022, Secondary Plant Leakage Vault #1, 023 Secondary Plant Leakage, Vault #2, 024, Secondary Plant Leakage, Vault #3.

   a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency	Sample Type
Flow, gpd	Report	Report	Monthly	Estimate
Oil and Grease, mg/1	15	20	Weekly when in use	Grab
Total Suspended Solids(TSS), mg/1	30	100	Weekly when in use	Grab

   b. The samples taken in compliance with the monitoring requirements specified above shall be taken at a representative point prior to mixing with any other stream.

Part I

7. During the period beginning Effective Date and lasting through Expiration Date, the permittee is authorized to discharge from outfall(s) serial number(s) 025, Liquid Waste Distillate and Steam Generator Blowdown and Recovery Regeneration Sump neutralized waste.

a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency	Sample Type
Flow, gpd	Report	300,000	Each batch or Continuous*	Estimate
Oil and Grease, mg/l	15	20	Once prior to batch discharge or Weekly*	Grab
Total Suspended Solids (TSS), mg/l	30	100	Once prior to batch discharge or Weekly*	Grab
Radioactivity	(See Subparagraph "c" below and Par. I.F.1.b)			

* Normally this outfall has a batch discharge; however, it is possible that an infrequent continuous blowdown may be necessary to control the chemical parameters. The sampling frequency reflects this change in operation.

b. Samples taken in compliance with the monitoring requirements specified above shall be taken at a representative point prior to mixing with any other stream.

c. The discharge of radioactive materials shall be in accordance with the requirements of the Nuclear Regulator Commission, (10 CFR 20 and the Seabrook Station Technical Specifications).

Part I

8. During the period beginning Effective Date and lasting through Expiration Date, the permittee is authorized to discharge from outfall(s) serial number(s) 026, Chemical Cleaning Wastes from stationary or portable treatment facilities.

a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency	Sample Type
Flow, gpd	Report	Report	1/Batch	Estimate
Oil and Grease, mg/l	15	20	1/Batch	Grab
Copper, mg/l	1.0	1.0	1/Batch	Grab
Iron, mg/l	1.0	1.0	1/Batch	Grab
Total Suspended Solids (TSS), mg/l	30	100	1/Batch	Grab

* Sample frequency is once per batch prior to release when treated chemical cleaning waste is being discharged from either stationary or portable holding tanks.

b. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units prior to each batch discharge.

c. A minimum of one Circulating Water System circulation pump shall be in operation when the Treated Chemical Cleaning Wastes are discharged.

d. The samples taken in compliance with the monitoring requirements specified above shall be taken at a representative point from stationary or portable holding tanks and prior to mixing with any other stream. The ultimate discharge shall be through the Circulating Cooling Water System Discharge, Discharge 001.

e. The permittee shall notify the Regional Administrator and the Director at least 72 hours prior to the discharge from any chemical cleaning operation and provide an estimate of the duration of the operation, the chemicals to be used, and the point or location of wastewater release into the discharge tunnel.

Part I

9. During the period beginning Effective Date and lasting through Expiration Date, the permittee is authorized to discharge from outfall(s) serial number(s) 027, Auxiliary Cooling Tower Blowdown.

a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency	Sample Type
Flow, gpd	Report	Report	Daily*	Estimate
Free Available Chlorine (FAC), mg/l	0.2	0.5	Daily*	Grab

* Sample frequency is once daily when Auxiliary Cooling Tower has a blowdown.

b. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be sampled daily when in use.

c. None of the 126 priority pollutants shall be used for cooling tower maintenance chemicals.

d. The samples taken in compliance with the monitoring requirements specified above shall be taken at a representative point prior to mixing with any other stream.

Part I

10. During the period beginning Effective Date and lasting through Expiration Date, the permittee is authorized to discharge from outfall(s) serial number(s) 003, Thermal Back-flushing Operation for biofouling control of the intake water system.*

a. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency	Sample Type
Flow-gpm	Report	500,000	When in use	Estimate**
Temperature, Maximum (T_{MAX}) °F	Report	120	Continuous when in use	Recording Max. Temp.

* In the back-flushing operation, the diffuser serves as the intake and the intake structure is the discharge point.

** Flow rate may be estimated from pump curves.

b. The pH shall not be less than 6.5 standard units nor greater than 8.0 standard units or as naturally occurs in the receiving water, Par. I.E.1.a (Sampling not required.)

c. There shall be no discharge of a oil sheen, foam, or floating solids in the vicinity of the intake ports. Naturally occurring sea foam in the intake transition structure is allowed.

d. The continuous back-flushing flow shall not exceed 120 °F maximum and the duration at the maximum temperature shall not exceed 2 hours. The total back-flushing cycle may not exceed 6 hours. The thermal plume which arises from the back-flushing operation shall have minimum impingement upon the Inner and Outer Sunk Rocks, in accordance with paragraph I.A.1.j.(1).

e. The permittee shall not conduct more than 4 back-flushing cycles per calendar year unless prior approval is obtained from the Regional Administrator and the Director.

f. There shall be no chlorination operations during the thermal backflushing process except for safety related functions, i.e.: Service Water System Chlorination.

g. The permittee shall notify the Regional Administrator and the Director 15 days before each back-flushing operation is initiated.

h. The permittee shall include in the monthly submittal of the Discharge Monitoring Report each time Discharge 003 is used giving the date, maximum temperature achieved, and duration of each back-flushing operation.

i. A study plan for alternatives to thermal backflushing shall be made in accordance with Par. I.A.j.(8) of this permit. This study shall submitted to EPA, the State and the TAC before the selected alternative is used to control the sessile organisms in the Intake Tunnel or by January 1,1995, whichever comes first.

11. Biological, Hydrological, and Chlorination Monitoring Programs

a. The Biological, Hydrological, and Chlorination Plan approved for 1992 is an enforceable element of this permit.

b. A Technical Advisory Committee (TAC) shall be organized to formalize the group of Federal and State biologists that have been coordinating, reviewing, and commenting upon the Pre-Operational and Operational biological, hydrological, and chlorination programs at Seabrook Station since 1976. The committee members shall be competent biologists from the following Federal and State regulatory agencies: NHDES, NHF&GD, USNMFS, and USEPA. The permittee is a non-voting member of the TAC.

c. The TAC may recommend acceptance, rejection, or modification of any program or schedule proposed by the permittee. After consideration of the TAC recommendation, the Regional Administrator and Director of the NH Water Supply and Pollution Control Division will render a decision on the proposed program or schedule modification. Upon approval, the proposed program and schedule becomes an enforceable element of this permit.

d. Annually, after the effective date of this permit, the permittee may propose changes to the approved biological, hydrological and chlorination programs to the Regional Administrator and the Director. A proposed modified program for the calendar year of 1994 must be submitted prior to January 1, 1994, for review and acceptance by the TAC. After the TAC acceptance and upon approval by the Regional Administrator and Director, the proposed program will become an enforceable element of this permit. During unusual biological, climatological, or hydrological conditions, the permittee may recommend at any time that these programs be modified on an emergency basis to ensure stable operation of the facility.

e. The biological, hydrological, and chlorination study reports shall be submitted on a semi-annual basis with the annual report summarizing the previous year's information and conclusions (December).

The semi-annual mid-year report (June) shall be a letter report providing the status of the on-going programs, the expected effort in the ensuing six months, and a synopsis of the data and information obtained since the last annual report. This letter shall give special emphasis in alerting the TAC of any detected anomalies that would suggest immediate consideration or investigation.

f. During operation of Seabrook Station, the permittee shall conduct such studies as are determined by the Regional Administrator and the Director to be necessary to evaluate the accuracy of the thermal plume predictions it has submitted to EPA in support of the NPDES Permit Application No. NH0020338 for both normal operation and thermal back-flushing operations.

g. Fish Mortality Monitoring and Reporting.

Any incidence of fish mortality associated with the discharge plume or of unusual number of fish impinged on the Intake Traveling Screens shall be reported to the Regional Administrator and the Director within 24 hours by telephone report as required in Paragraph II.D.1.e of this permit. A written confirmation report is to be provided within five (5) days. This report should include the following:

(1) The kinds, sizes, and approximate number of fish involved in the incident.

(2) The time, date, and duration of the occurrence.

(3) The operating mode of the station at the time of the occurrence.

(4) The opinion of the permittee as to the cause of the incident.

(5) The remedial action that the permittee will undertake to prevent a recurrence of the incident.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall notify the Regional Administrator and the Director 30 days prior to the date that any treated sanitary waste (Discharge 021) and/or the storm water discharges are diverted to the cooling water discharge through the a manhole in the Circulating Water System, Discharge 001.

2. The permittee shall notify the Regional Administrator and the Director 30 days prior to the "Diversion Date", the date that the flow from Discharge 002 into the Browns River is terminated.

C. SLUDGE CONDITIONS

All treatment works treating domestic sewage are required to have conditions which implement the technical sludge standards required by Section 405(d) of the Clean Water Act. The conditions require the following:

1. The permittee shall comply with all existing Federal and State laws and regulations that apply to sewage sludge use and disposal practices and with the Section 405 (d) of the Clean Water Act (CWA) technical standards when promulgated.

   If an applicable management practice or numerical limitation for pollutants in sewage sludge more stringent than existing Federal and State regulations is promulgated under Section 405 (d) of the CWA, the permittee shall comply with the new requirements no later than the compliance specified in the applicable regulations as required by Section 405 (d) of the CWA.

2. The permittee shall give prior notice to the Regional Administrator and the Director of any change(s) planned in the permittee's sludge use or disposal practice.

3. A change in the permittee's sludge use or disposal practice is a cause for modification of the permit. It is a cause for revocation and reissuance of the permit if the permittee requests or agrees.

4. The permittee shall monitor the sludge prior to ultimate disposal for the following pollutants (total metals): copper, cadmium, chromium, lead, nickel and zinc. Note: Additional parameters must be tested should the sludge be disposed of through the land application method. The results shall be submitted with the appropriate monthly DMR.

D. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) no later than 180 days after the permit's effective date. The SWPPP shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from this steam electric power plant. In addition, the SWPPP shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharge associated with industrial activity at this facility and to assure compliance with the terms and conditions of this permit.

Attachment B provides the "Generalized Instructions for the Preparation of Storm Water Pollution Plans (SWPPP)" to be utilized for Seabrook Station as appropriate and applicable.

E. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the completed reporting period.

Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and one signed copy to the State at the following addresses:

Environmental Protection Agency
NPDES Program Operation Section
P. O. Box 8127
Boston, MA 02114

The State Agency is:

New Hampshire DES
Water Supply & Pollution Control Division
Permits and Compliance Section
6 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03301

F. State Industrial Permit Conditions

1. The permittee shall comply with the following conditions which are included as State Certification requirements:

a. "The pH for Class B waters is 6.5 to 8.0 s.u. or as naturally occurs in the receiving water. The 6.5 to 8.0 s.u. range must be achieved in the final effluent unless the permittee can demonstrate to the Division: (1) that the range should be widened due to naturally occurring conditions in the receiving water or (2) that the naturally occurring source water pH is unaltered by the permittee's operations. The scope of any demonstration project must receive prior approval from the Division. In no case shall the above procedure result in pH limits less restrictive than any applicable federal effluent limitation guidelines."

b. "The permittee shall submit the Executive Summary and Section D (Surface Water) of the Seabrook Station Annual Radiological Environmental Operating Report to NH DES at the address in Par. I.E.1 and to all members of the Technical Advisory Committee (TAC) within 30 days of preparation."

2. This NPDES Discharge Permit is issued by the U.S. Environmental Protection Agency (EPA) under Federal and State law. Upon final issuance by the federal EPA, the New Hampshire Department of Environmental Services, Water Supply and Pollution Control Division, may adopt this permit, including all terms and conditions, as a state discharge permit pursuant to RSA 485-A:13.

Each agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not effect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared invalid, illegal or otherwise issued in violation of State law, such permit shall remain in full force and effect under Federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit, if adopted as a state permit, shall remain in full force and effect under State law as a Permit issued by the State of New Hampshire.

ATTACHMENT A

Chronic (and Modified Acute) Toxicity Test Prccedure and Protocol:

- **Inland Silverside (Menidia beryllina) growth and survival test.**

I. GENERAL REQUIREMENTS

The permittee shall conduct acceptable toxicity tests in accordance with the appropriate test protocols described below. The permittee must collect discharge samples and perform the toxicity tests that are required by Part I of the NPDES permit. Chronic toxicity data shall be reported as outlined in Section VIII.

II. TEST FREQUENCY AND SAMPLING REQUIREMENTS

See Part I of the NPDES permit for sampling location, sample type, test frequency, test species, and test date(s) requirements. Chain of Custody information should be provided for each sample tested.

A chronic toxicity sampling event is defined as three discharge (composite or grab) samples collected over the seven-day period (see Section IV).

III. METHODS

Methods to follow are those recommended by EPA in:

Weber, C.I., et al, 1988. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters To Marine and Estuarine Organisms, Office of Research and Development, Cincinnati, OH. EPA/600/4-87/028.

Any exceptions are stated herein.

IV. SAMPLE COLLECTION

For each sampling event, three discharge samples shall be collected over a 7-day exposure period. An initial sample (day 0) is used to start the test. The additional two samples are collected for use at the start of day 3 and 5. Renewal of test concentrations is conducted daily with the most recently collected discharge sample. The initial (day 0) sample will be analyzed chemically. Day 3 and 5 samples will be held until test completion. If either the day 3 or 5 renewal sample is of

sufficient potency to cause lethality to 50 percent or more test organisms in any of the dilutions, then a chemical analysis shall be performed on the appropriate sample(s) as well.

Aliquots shall be split from the sample, containerized and preserved (as per 40 CFR Part 136) for the chemical and physical analyses. The remaining sample shall be dechlorinated (if necessary) in the laboratory using sodium thiosulfate for subsequent toxicity testing. Grab samples must be used for pH, temperature, and total residual oxidants (as per 40 CFR Part 122.21).

The Methods for Aquatic Toxicity Identification Evaluations (Phase I), EPA/600/3-88/034, Section 8.7, provides detailed information regarding the use of sodium thiosulfate (i.e. dechlorination).

All samples held overnight shall be refrigerated at 4 ± 2°C.

V. DILUTION WATER

Dilution water used for toxicity analysis shall be collected at a point away from the discharge which is free from toxicity or other sources of contamination. When using receiving water as the dilution water an additional control (0% effluent), made up from a laboratory water of known quality, will also be run.

If the receiving water diluent is found to be, or suspected to be toxic or unreliable, an alternate or standard dilution water of known quality with a salinity, pH, conductivity, and total suspended solids similar to that of the receiving water may be substituted **AFTER RECEIVING WRITTEN APPROVAL FROM THE PERMIT ISSUING AGENCY(S)**. It may prove beneficial to the permittee to have the proposed dilution water source screened for suitability prior to toxicity testing. For further information see Section 7, page 19 of EPA/600/4-87/028.

Dilution water used for marine chronic toxicity shall be of sufficient quality to meet minimum acceptability of test results (see Section VI).

VI. REGION I RECOMMENDED TEST CONDITIONS FOR THE INLAND SILVERSIDE (Menidia beryllina) GROWTH AND SURVIVAL TEST[1]

1.	Test type	Static, renewal
2.	Salinity	5 o/oo TO 32 o/oo ± 2 o/oo
3.	Temperature	25 ± 2°C
4.	Light quality	Ambient laboratory light
5.	Light intensity	10-20 uE/m^2/s, or 50-100 ft-C (Ambient Laboratory Levels)
6.	Photoperiod	16 hr light, 8 hr darkness
7.	Test vessel size	300 - 1000 ml beakers or equivalent (glass test chambers should be used)
8.	Test solution volume	250 ml minimum (loading and DO restrictions must be met)
9.	Renewal of test solutions	Daily using most recently collected sample.
10.	Age of test organisms	Seven to eleven days post hatch.
11.	Larvae/test chamber	15 (minimum of 10)
12.	Number of replicate chambers	4 (minimum of 3) per treatment
13.	Source of food	Newly hatched Artemia nauplii less than 24 hr old
14.	Feeding regime	Feed once a day 0.10 g wet wt Artemia nauplii per replicate on days 0-2; feed 0.15 g wet wt Artemia nauplii per replicate on days 3-6
15.	Cleaning	Siphon daily, immediately before test solution renewal and feeding
16.	Aeration[2]	None

17.	Dilution water	Uncontaminated source of natural seawater; or deionized water mixed with hypersaline brine or equivalent artificial seawater.
18.	Effluent concentrations[3]	5 and a control. An additional effluent concentration (% effluent) is required.
19.	Dilution factor	0.5
20.	Test duration	7 days
21.	Effects measured	Survival and growth (weight)
22.	Acceptability of test	The average survival of control larvae is a minimum of 80%, and the average dry wt of unpreserved control larvae is a minimum of 0.5 mg, or the average dry wt of preserved control larvae is a minimum of 0.43 mg.
23.	Sampling requirements	For on-site tests, samples are collected daily and used within 24 hours of the time they are removed from the sampling device. For off-site tests, samples must be first used within 48 hours of collection.
24.	Sample Volume Required	Minimum of 5 liters.

Footnotes:

1 Adapted from EPA/600/4-87/028.

2 If DO falls below 60% of saturation, aerate all chambers at a rate of less than 100 bubbles/min. Routine DO checks are recommended.

3 When receiving water is used for dilution an additional control made up of standard dilution water (0% effluent) is required.

VII. CHEMICAL ANALYSIS

The following chemical analyses shall be performed for each sampling event.

Parameter	Effluent	Diluent	Minimum Detection Limit(mg/L)
pH	x	x	---
Specific Conductance	x	x	---
Salinity	x	x	PPT(o/oo)
Total Residual Oxidants[1]	x	x	0.02
Total Solids and Suspended Solids	x	x	---
Ammonia	x	x	0.1
Total Organic Carbon	x	x	0.5
Total Metals			
Cd	x		0.01
Cr, Ni	x		0.05
Pb, Zn, Cu	x		0.01
Al	x		0.02

In addition, the following chemical analyses shall be performed as part of each daily renewal procedure on each dilution and the controls.

Parameter	Beginning of 24-hr Exposure Period	End of 24-hr Exposure Period
Dissolved Oxygen	x	x
Temperature	x	
pH	x	
Specific Conductance	x	

Superscript:

[1] Total Residual Oxidants

Methods: either of the following methods from the 16th Edition of the APHA (1985) Standard Methods for the Examination of Water and Wastewater must be used for these analyses:

Method 408-C (Amperometric Titration Method)-the preferred method;
Method 408-D (Ferrous Titrimetric Method).

VIII. TOXICITY TEST REPORT ELEMENTS

A report of results will include the following:

- Description of sample collection procedures, site description;
- Names of individuals collecting and transporting samples, times and dates of sample collection and analysis; and
- General description of tests: age of test organisms, origin, dates and results of standard toxicant tests; light and temperature regime; other information on test conditions if different than procedures recommended.

Toxicity test data shall include the following:

Chronic

- Daily survival of test organisms in the controls and all replicates in each dilution.
- Chronic test data shall undergo hypothesis testing to determine if the distribution of results is normal using the Shapiro-Wilks test. The variance must also be tested for homogeneity using Bartlett's Test. Then the endpoint estimates, NOEC and LOEC must be determined using Dunnett's Procedure, Bonferroni's T-Test, Steel's Many-One Rank Test, or Wilcoxon Rank Sum Test with Bonferroni adjustment. The choice of test depends on the number of replicates and whether the variance is homogeneous or not. See EPA/600/4-87/028 for details. All printouts and graphical displays must be submitted.
- C-NOEC: Chronic No Observed Effect Concentration.
- LOEC: Lowest Observed Effect Concentration.
- MATC: Maximum Allowable Toxicant Concentration.
- All chemical/physical data generated (include detection limits).
- Raw data and bench sheets. (See sample data sheets pp. 8-11.)
- Any other observations and test conditions that may have affected the outcome of the test.

Acute

- Survival for each concentration and replication at time 24, and 48 hours.
- LC50 and 95% confidence limits shall be calculated using one of the following methods in order of preference Probit, Trimmed Spearman Karber, Moving Average Angle, or the graphical method. All printouts (along with the name of the program, the date, and the author(s)) and graphical displays must be submitted. When data is analyzed by hand, worksheets should be submitted.

  The Probit, Trimmed Spearman Karber, and Moving Average Angle methods of analyses can only be used when mortality of some of the test organisms are observed in at least two of

the (% effluent) concentrations tested (i.e. partial mortality). If a test results in a 100% survival and 100% mortality in adjacent treatments ("all or nothing" effect), a LC50 may be estimated using the graphical method.

- All chemical data/physical generated (include detection limits).
- Raw data and bench sheets.
- Any other observations or test conditions affecting test outcome.

IX. REPORTING

Signed copies of the toxicity testing reports shall be submitted as required by Part I of the permit.

Any exceptions are stated herein.

Attachment B

Generalized Instructions
Preparation of Storm Water Pollution Prevention Plan (SWPPP)
(March 1993)

Contents

Attachment C

Generalized Instructions

Preparation of Storm Water Pollution Prevention Plans (SWPPP)

(March 1993)

Preface

A Storm Water Pollution Prevention Plan (SWPPP) shall be developed for this facility. The Storm Water Pollution Prevention Plan shall be prepared in accordance with good engineering practices and in accordance with the factors outlined in 40 CFR 125.3(d) (2) or (3) as appropriate. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee must implement the provisions of the Storm Water Pollution Prevention Plan required under this part as a condition of this permit.

This attachment provides the "Generalized SWPPP Instructions"for developing a SWPPP for any facility. Therefore, the SWPPP developed for a specific facility shall contain only those elements which are applicable and appropriate to the plant and site under consideration.

A. Deadlines for Plan Preparation and Compliance

1. The SWPPP for this facility shall be prepared, and except as provided elsewhere in this permit, shall provide for compliance with the terms of the permit and the plan, no later than 180 days after the effective date of the permit.

2. Upon a showing of good cause, the Regional Administrator (RA) may establish, in writing, a later date for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

B. Signature and Plan Review

1. The plan shall be signed in accordance with Part II D.3.(Signatory Requirement) and be retained on-site at the facility in accordance with Part II.C.1.b. (Monitoring and Records) of this permit.

2. The permittee shall make plans available upon request to the RA, or authorized representative, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate

storm sewer system, to the operator of the municipal system.

3. The RA, or authorized representative, may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this Part. Within 30 days of such notification from the RA, (or as otherwise provided by the RA), or authorized representative, the permittee shall make the required changes to the plan and shall submit to the RA a written certification that the requested changes have been made.

C. Keeping Plans Current

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States or if the Storm Water Pollution Prevention Plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Section D.2 of this attachment (Description of Potential Pollutant Sources), or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Amendments to the plan may be reviewed by EPA in the same manner as Section C of this attachment (above).

D. Contents of Plan

The plan shall include, at a minimum, the following items:

1. Pollution Prevention Team: Each plan shall identify a specific individual or individuals within the facility organization as members of a Storm Water Pollution Prevention Team who are responsible for developing the Storm Water Pollution Prevention Plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's Storm Water Pollution Prevention Plan.

2. Description of Potential Pollutant Sources: Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during any dry weather from separate storm sewers draining the

facility. Each plan shall identify all activities and significant materials which may be potentially significant pollutant sources. Each plan shall include, at a minimum:

a. Drainage:

(1) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Section D.2.c of this attachment (Spills and Leaks) have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

(2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

b. Inventory of Exposed Materials: An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of, three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of, three years prior to the date of the issuance

of this permit and the present; the location and description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

c. Spills and Leaks: A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the effective date of this permit. Such a list shall be updated as appropriate during the term of the permit.

d. Sampling Data: A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

e. Risk Identification and Summary of Potential Pollutant Sources: A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concern shall be identified.

3. Measures and Controls: Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

a. Good Housekeeping: Good housekeeping requires the maintenance of areas, which may contribute pollutants to storm waters discharges, in a clean, orderly manner.

b. Preventive Maintenance: A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices e.g. cleaning oil/water separators, catch basins) as

well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

c. Spill Prevention and Response Procedures: Areas where potential spills, which can contribute pollutants to storm water discharges, can occur and their accompanying drainage points shall be identified clearly in the Storm Water Pollution Prevention Plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

d. Inspections: In addition to or as part of the comprehensive site evaluation required under Section D.4 of this attachment, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspection shall be maintained.

e. Employee Training: Employee training programs shall inform personnel responsible for implementing activities identified in the Storm Water Pollution Prevention Plan or otherwise responsible for storm water management, at all levels of responsibility, of the components and goals of the Storm Water Pollution Prevention Plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

f. Record-keeping and Internal Reporting Procedures: A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

g. Non-Storm Water Discharges:

(1) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part II.D.3. of this permit. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the Storm Water Pollution Prevention Plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant source of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the RA in writing.

(2) Except for flows from fire fighting activities, sources of non-storm water that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

h. Sediment and Erosion Control: The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

i. Management of Runoff: The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces

pollutants in storm water discharges from the site. The plan shall provide measures that the permittee determines to be reasonable and appropriate and these measures shall be implemented and maintained. The potential of various sources at the facility which contribute pollutants to storm water discharges, associated with industrial activity [see Section D.2 of this attachment (Description of Potential Pollutant Sources)] shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

4. Comprehensive Site Compliance Evaluation: Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in Section D.4.d of this attachment (below), in no case less than once a year. Such evaluations shall provide:

   a. Visual Inspection: Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

   b. Plan Revision: Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with Section D.2 of this attachment (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with Section D.3 of this attachment (Measures and Controls) shall be revised as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than twelve weeks after the inspection.

c. Inspection Report: A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, and actions taken in accordance with Section D.4.b of this attachment (above) shall be made and retained as part of the Storm Water Pollution Prevention Plan for at least one year after coverage under this permit terminates. The report shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the Storm Water Pollution Prevention Plan and this permit. The report shall be signed in accordance with Part II.D.3.(signatory requirements) of this permit.

d. Inactive Mining: Where annual site inspections are shown in the plan to be impractical for inactive mining sites due to the remote location and inaccessibility of the site, site inspections required under this part shall be conducted at appropriate intervals specified in the plan, but, in no case less than once in three years.

5. Consistency with Other Plans: Storm Water Pollution Prevention Plans may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under Section 311 of the CWA or Best Management Practices (BMP) Programs otherwise required by an NPDES permit for the facility as long as such requirement is incorporated into the Storm Water Pollution Prevention Plan.

6. Additional Requirements for Storm Water Discharges Associated with Industrial Activity through Municipal Separate Storm Sewer Systems serving a Population of 100,000 or more:

a. In addition to the applicable requirements of this permit, the permittee must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

b. The permittee shall make plans available to the municipal operator of the system upon request.

7. Additional Requirements for Storm Water Discharges Associated with Industrial Activity from Facilities subject to Emergency Planning and Community Right-to-Know (EPCRA) Section 313 Requirements: In addition to

the requirements of Section D.1 through D.4 of this attachment and other applicable conditions of this permit, Storm Water Pollution Prevention Plans for facilities subject to reporting requirements under EPCRA Section 313 for chemicals which are classified as "Section 313 Water Priority Chemicals" shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines:

a. Minimum controls: In areas where Section 313 Water Priority Chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:

(1) Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water run-on to come into contact with significant sources of pollutants; or

(2) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water, and wind.

b. Additional Considerations: In addition to the minimum standards listed above, the Storm Water Pollution Prevention Plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:

(1) Material storage areas for Section 313 Water Priority Chemicals for liquids: Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 Water Priority Chemicals.

(a) No tank or container shall be used for the storage of a Section 313 Water Priority Chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

(b) Liquid storage areas for Section 313 Water Priority Chemicals shall be

operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.

(2) Material storage areas for Section 313 Water Priority Chemicals other than liquids: Material storage areas for Section 313 Water Priority Chemicals other than liquids which are subject to runoff, leaching, or wind shall incorporate drainage or other control features which will minimize the discharge of Section 313 Water Priority Chemicals by reducing storm water contact with Section 313 Water Priority Chemicals.

(3) Truck and rail car loading and unloading areas for liquids in Section 313 Water Priority Chemicals: Truck and rail car loading and unloading areas for liquid Section 313 Water Priority Chemicals shall be operated to minimize discharges of Section 313 Water Priority Chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

(4) Process/Work Areas: Areas where Section 313 Water Priority Chemicals are transferred, processed or otherwise handled - Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 Water Priority Chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with Section 313 Water Priority

Chemicals. Additional protection such as covers or guards to prevent exposure to wind, spraying or releases from pressure relief vents from causing a discharge of Section 313 Water Priority Chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 Water Priority Chemicals without secondary containment.

(5) Discharges from areas covered by Paragraphs 7.b.(1), (2), (3) or (4):

(a) Drainage from areas covered by paragraphs 7.b.(1), (2), (3) or (4) of this part should be restrained by values or other positive means, to prevent the discharge of a spill or other excessive leakage of Section 313 Water Priority Chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

(b) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.

(c) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 Water Priority Chemicals, return the spilled material to the facility.

(d) Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

(6) Facility site runoff other than from areas covered by 7.b.(1), (2), (3) or (4): Other areas of the facility [those not addressed in paragraphs 7.b.(1), (2), (3) or (4)], from which runoff which may contain Section 313 Water Priority Chemicals or spills of Section 313 Water Priority Chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent

discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

(7) Preventive maintenance and housekeeping: All areas of the facility shall be inspected at specific intervals identified in the plan for leaks or conditions that could lead to discharges of Section 313 Water Priority Chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or non-containment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 Water Priority Chemicals to waters of the United States, action to stop the leak or otherwise prevent the significant release of section 313 Water Priority Chemicals to waters of the United States shall be immediately taken or the unit or process shut down until such action can be taken. When a leak or non-containment of a Section 313 Water Priority Chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

(8) Facility security: Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

(9) Training: Facility employees and contractor personnel that work in areas where Section 313 Water Priority Chemicals are used or stored shall be trained in and informed of preventive measures at the facility. Fmployee

training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the Storm Water Pollution Prevention Plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 Water Priority Chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 Water Priority Chemicals can be isolated and contained before a discharge of a Section 313 Water Priority Chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

(10) Engineering certification: The Storm Water Pollution Prevention Plan for a facility subject to EPCRA Section 313 requirements for chemicals which are classified as "Section 313 Water Priority Chemicals" shall be reviewed by a Registered Professional Engineer and certified to by such Professional Engineer. A Registered Professional Engineer shall recertify the plan every three years thereafter or as soon as practicable after significant modification are made to the facility. By means of these certifications, the engineer, having examined the facility and being familiar with the provisions of this part, shall attest that the Storm Water Pollution Prevention Plan has been prepared in accordance with good engineering practices. Such certifications shall in no way relieve the owner or operator of a facility covered by the plan of their duty to prepare and fully implement such plan.

8. Additional Requirements for Salt Storage: Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to a waters of the United States shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Dischargers

shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than October 1, 1995. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the United States.

CONTENTS - PART II
(September 1, 1993)

SECTION A. GENERAL REQUIREMENTS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

a. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405 (d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

b. The CWA provides that any person who violates Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any of such sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Sections 402 (a)(3) or 402 (b)(8) of the CWA is subject to a civil penalty not to exceed $25,000 per day for each violation. Any person who negligently violates such requirements is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. Any person who knowingly violates such requirements is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both. Note: See 40 CFR §122.41(a)(2) for additional enforcement criteria.

c. Any person may be assessed an administrative penalty by the Administrator for violating Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations

...re not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

2. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

3. Duty to Provide Information

The permittee shall furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

4. Reopener Clause

The Regional Administrator reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA in order to bring all discharges into compliance with the CWA.

For any permit issued to a treatment works treating domestic sewage (including "sludge-only facilities"), the Regional Administrator or Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under Section 405 (d) of the CWA. The Regional Administrator or Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or contains a pollutant or practice not limited in the permit.

Permit modification or revocation will be conducted according to 40 CFR §§122.62, 122.63, 122.64 and 124.5.

5. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee

from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA, or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

6. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges.

7. Confidentiality of Information

a. In accordance with 40 CFR Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words ''confidential business information'' on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information).

b. Claims of confidentiality for the following information will be denied:

(1) The name and address of any permit applicant or permittee;

(2) Permit applications, permits, and effluent data as defined in 40 CFR §2.302(a)(2).

c. Information required by NPDES application forms provided by the Regional Administrator under §122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

8. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Regional Administrator. (The Regional Administrator shall not grant

permission for applications to be submitted later than the expiration date of the existing permit.)

9. Right of Appeal

Within thirty (30) days of receipt of notice of a final permit decision, any interested person, including the permittee, may submit a request to the Regional Administrator for an Evidentiary Hearing under Subpart E, or a Non-Adversary Panel Hearing under Subpart F, of 40 CFR Part 124, to reconsider or contest that decision. The request for a hearing must conform to the requirements of 40 CFR §124.74.

10. State Authorities

Nothing in Part 122, 123, or 124 precludes more stringent State regulation of any activity covered by these regulations, whether or not under an approved State program.

11. Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, and local laws and regulations.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Bypass

a. Definitions.

(1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations.

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Paragraphs B.4.c and 4.d of this section.

c. Notice.

(1) Anticipated bypass.

If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass.

The permittee shall submit notice of an unanticipated bypass as required in Paragraph D.1.e (24-hour notice).

d. Prohibition of bypass.

(1) Bypass is prohibited, and the Regional Administrator may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(c) (i) The permittee submitted notices as required under Paragraph 4.c of this section.

(ii) The Regional Administrator may approve an anticipated bypass, after considering its adverse effects, if the Regional Administrator determines that it will meet the three conditions listed above in Paragraph 4.d of this section.

5. Upset

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary non-compliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph B.5.c of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly

signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required in Paragraphs D.1.a and 1.e (24-hour notice); and

(4) The permittee complied with any remedial measures required under B.3. above.

d. Burden of proof.

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

SECTION C. MONITORING AND RECORDS

1. Monitoring and Records

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application except for the information concerning storm water discharges which must be retained for a total of 5 years. This retention period may be extended by request of the Regional Administrator at any time.

c. Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

d. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in the permit.

e. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

2. Inspection and Entry

The permittee shall allow the Regional Administrator, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Reporting Requirements

a. Planned changes. The permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies neither to pollutants which are subject to the effluent limitations in the permit, nor to the notification requirements at 40 CFR §122.42(a)(1).

(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition or change may justify the application of permit conditions different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. Anticipated noncompliance. The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. Transfers. This permit is not transferable to any person except after notice to the Regional Administrator. The Regional Administrator may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See §122.61; in some cases, modification or revocation and reissuance is mandatory.)

d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Regional Administrator for reporting results of monitoring of sludge use or disposal practices.

(2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Administrator.

(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Administrator in the permit.

e. Twenty-four hour reporting.

(1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances.

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(2) The following shall be included as information which must be reported within 24 hours under this paragraph.

(a) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See §122.41(g).

(b) Any upset which exceeds any effluent limitation in the permit.

(c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Regional Administrator in the permit to be reported within 24 hours. (See §122.44(g).)

(3) The Regional Administrator may waive the written report on a case-by-case basis for reports under Paragraph D.1.e if the oral report has been received within 24 hours.

f. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

g. Other noncompliance.

The permittee shall report all instances of noncompliance not reported under Paragraphs D.1.d, D.1.e and D.1.f of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph D.1.e of this section.

h. Other information.

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, it shall promptly submit such facts or information.

2. Signatory Requirement

a. All applications, reports, or information submitted to the Regional Administrator shall be signed and certified. (See §122.22)

b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

3. Availability of Reports

Except for data determined to be confidential under Paragraph A.8 above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Regional Administrator. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA.

SECTION E. OTHER CONDITIONS.

1. DEFINITIONS FOR INDIVIDUAL NPDES PERMITS INCLUDING STORM WATER REQUIREMENTS

For purposes of this permit, the following definitions shall apply.

Administrator means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

Applicable standards and limitations means all State, interstate, and Federal standards and limitations to which a "discharge", a "sewage sludge use or disposal practice", or a related activity is subject to, including "effluent limitations", water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices", pretreatment standards, and "standards for sewage sludge use and disposal" under Sections 301, 302, 303, 304, 306, 307, 308, 403, and 405 of CWA.

Application means the EPA standard national forms for applying for a permit, including any additions, revisions or modifications to the forms; or forms approved by EPA for use in "approved States," including any approved modifications or revisions.

Average - The arithmetic mean of values taken at the frequency required for each parameter over the specified period. For total and/or fecal coliforms and Escherichia coli, the average shall be the geometric mean.

Average monthly discharge limitation means the highest allowable average of "daily discharges" over a calendar month calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Average weekly discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Best Professional Judgement (BPJ) means a case-by-case determination of Best Practicable Treatment (BPT), Best Available Treatment (BAT) or other appropriate technology-based standard based on an evaluation of the available technology to achieve a particular pollutant reduction and other factors set forth in 40 CFR §125.3 (d).

Class I Sludge Management Facility means any POTW identified under 40 CFR §403.8(a) as being required to have an approved pretreatment program [including such POTWs located in a state that has elected to assume local program responsibilities pursuant to 40 CFR §403.10(e)] and any other treatment works treating domestic sewage classified as a "Class I Sludge Management Facility" by the Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the State Director, because of the potential for its sludge use or disposal practices to adversely affect public health and the environment.

Coal pile runoff means the rainfall runoff from or through any coal storage pile.

Composite Sample - A sample consisting of a minimum of eight grab samples collected at equal intervals during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportional to flow, or a sample continuously collected proportionally to flow over that same time period.

Construction Activities.The following definitions apply to construction activities:

(a) Commencement of Construction is the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

(b) Dedicated portable asphalt plant is a portable asphalt plant located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR Part 443.

(c) Dedicated portable concrete plant is a portable concrete plant located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

(d) Final Stabilization means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(e) Runoff coefficient means the fraction of total rainfall that will appear at the conveyance as runoff.

Contiguous zone means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone.

Continuous discharge means a "discharge" which occurs without interruption throughout the operating hours of the facility except for infrequent shutdowns for maintenance, process changes, or similar activities.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117; 33 U.S.C. §§1251 et seq.

Daily Discharge means the "discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Director normally means the person authorized to sign NPDES permits by EPA or the State or an authorized representative. Conversely, it also could mean the Regional Administrator or the State Director as the context requires.

Discharge Monitoring Report Form (DMR) means the EPA standard national form, including any subsequent additions, revisions, or modifications, for the reporting of self-monitoring results by permittees. DMRs must be used by "approved States" as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Discharge of a pollutant means:

(a) Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or
(b) Any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation (See "Point Source" definition).

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances leading into privately owned treatment works.

This term does not include an addition of pollutants by any "indirect discharger."

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by "approved states" as well as by EPA. EPA will supply DMRs to any approve State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Effluent limitation means any restriction imposed by the Regional Administrator on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from "point sources" into "waters of the United States," the waters of the "contiguous zone," or the ocean.

Effluent limitations guidelines means a regulation published by the Administrator under Section 304(b) of CWA to adopt or revise "effluent limitations."

EPA means the United States "Environmental Protection Agency."

Flow-weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab Sample - An individual sample collected in a period of less than 15 minutes.

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of CWA.

Indirect Discharger means a non-domestic discharger introducing pollutants to a publicly owned treatment works.

Interference means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

(a) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal: and

(b) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act (CWA), the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resources Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

Large and Medium municipal separate storm sewer system means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and 40 CFR Part 122); or (ii) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR 122); or (iii) owned or operated by a municipality other than those described in Paragraph (i) or (ii) and that are designated by the Regional Administrator as part of the large or medium municipal separate storm sewer system.

Maximum daily discharge limitation means the highest allowable "daily discharge" concentration that occurs only during a normal day (24-hour duration).

Maximum daily discharge limitation (as defined for the Steam Electric Power Plants only) when applied to Total Residual Chlorine (TRC) or Total Residual Oxidant (TRO) is defined as "Maximum Concentration or "Instantaneous Maximum Concentration" during the two hours of a chlorination cycle (or fractions thereof) prescribed in the Steam Electric Guidelines, 40 CFR Part 423. These three synonymous terms all mean "a value that shall not be exceeded" during the two-hour chlorination cycle. This interpretation differs from the specified NPDES Permit requirement, 40 CFR §122.2, where the two terms of "Maximum Daily Discharge" and "Average Daily Discharge" concentrations are specifically limited to the daily (24-hour duration) values.

Municipality means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribe organization, or a designated and approved management agency under Section 208 of CWA.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of CWA. The term includes an "approved program."

New discharger means any building, structure, facility, or installation:

(a) From which there is or may be a "discharge of pollutants";

(b) That did not commence the "discharge of pollutants" at a particular "site" prior to August 13, 1979;

(c) Which is not a "new source"; and

(d) Which has never received a finally effective NPDES permit for discharges at that "site".

This definition includes an "indirect discharger" which commences discharging into "waters of the United States" after August 13, 1979. It also includes any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a "site" for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a "site" under EPA's permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Regional Administrator in the issuance of a final permit to be an area of biological concern. In determining whether an area is an area of biological concern, the regional Administrator shall consider the factors specified in 40 CFR §§ 125.122.(a)(1) through (10).

An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a "new discharger" only for the duration of its discharge in an area of biological concern.

New source means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

(a) After promulgation of standards of performance under Section 306 of CWA which are applicable to such source, or

(b) After proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

NPDES means "National Pollutant Discharge Elimination system."

Owner or operator means the owner or operator of any "facility or activity" subject to regulation under the NPDES programs.

Pass through means a Discharge which exits the POTW into Waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Permit means an authorization, license, or equivalent control document issued by EPA or an "approved State."

Person means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Point source means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (See §122.2)

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. §§2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

(a) Sewage from vessels; or

(b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

Primary industry category means any industry category listed in the NRDC settlement agreement (Natural Resources Defense Council et al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976),

modified 12 E.R.C. 1833 (D.D.C. 1979)]; also listed in Appendix A of 40 CFR Part 122.

Privately owned treatments works means any device or system which is (a) use to treat wastes from any facility whose operation is not the operator of the treatment works or (b) not a "POTW".

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly Owned Treatment Works (POTW) means any facility or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a "State" or "municipality."

This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

Regional Administrator means the Regional Administrator, EPA, Region I, Boston, Massachusetts.

Secondary Industry Category means any industry category which is not a "primary industry category."

Section 313 water priority chemical means a chemical or chemical categories which are:

(1) listed at 40 CFR §372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986);

(2) present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and

(3) satisfies at least one of the following criteria:

(i) are listed in Appendix D of 40 CFR Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances);

(ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR §116.4; or

(iii) are pollutants for which EPA has published acute or chronic water quality criteria.

Septage means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

Sewage Sludge means any solid, semisolid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. Sewage sludge includes, but is not limited to solids removed during primary, secondary, or advanced wastewater treatment, scum, septage, portable toilet pumpings, Type III Marine Sanitation Device pumpings (33 CFR Part 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

Sewage sludge use or disposal practice means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.

Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR §110.10 and CFR §117.21) or Section 102 of CERCLA (see 40 CFR §302.4).

Sludge-only facility means any "treatment works treating domestic sewage" whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to Section 405(d) of the CWA, and is required to obtain a permit under 40 CFR §122.1(b)(3).

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands.

Storm Water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm Water discharge associated with industrial activity means the discharge from any conveyance with is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. (See 40 CFR §122.26 (b)(14) for specifics of this definition).

Time-weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

Toxic pollutants means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices", any pollutant identified in regulations implementing Section 405(d) of the CWA.

Treatment works treating domestic sewage means a POTW or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices.

For purposes of this definition, "domestic sewage" includes waste and wastewater from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under Section 405(f) of the CWA, the Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR Part 503 as a "treatment works treating domestic sewage", where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 CFR Part 503.

Waste pile means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.

Waters of the United States means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate "wetlands",

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats,

sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in Paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in Paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR §423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Whole Effluent Toxicity (WET) means the aggregate toxic effect of an effluent measured directly by a toxicity test. (See Abbreviations Section, following, for additional information.)

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

2. DEFINITIONS FOR NPDES PERMIT SLUDGE USE AND DISPOSAL REQUIREMENTS.

Active sewage sludge unit is a sewage sludge unit that has not closed.

Aerobic digestion is the biochemical decomposition of organic matter in sewage sludge into carbon dioxide and water by microorganisms in the presence of air.

Agricultural land is land on which a food crop, a feed crop, or a fiber crop is grown. This includes range land and land used as pasture.

Agronomic rate is the whole sludge application rate dry weight basis) designed:

(1) To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and

(2) To minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.

Air pollution control device is one or more processes used to treat the exit gas from a sewage sludge incinerator stack.

Anaerobic digestion is the biochemical decomposition of organic matter in sewage sludge into methane gas and carbon dioxide by microorganisms in the absence of air.

Annual pollutant loading rate is the maximum amount of a pollutant that can be applied to a unit area of land during a 365 day period.

Annual whole sludge application rate is the maximum amount of sewage sludge (dry weight basis) that can be applied to a unit area of land during a 365 day period.

Apply sewage sludge or sewage sludge applied to the land means land application of sewage sludge.

Aquifer is a geologic formation, group of geologic formations, or a portion of a geologic formation capable of yielding ground water to wells or springs.

Auxiliary fuel is fuel use to augment the fuel value of sewage sludge. This includes, but is not limited to, natural gas, fuel oil, coal, gas generated during anaerobic digestion of sewage sludge, and municipal solid waste (not to exceed 30 percent of the dry weight of sewage sludge and auxiliary fuel together). Hazardous wastes are not auxiliary fuel.

Base flood is a flood that has a one percent chance of occurring in any given year (i.e., a flood with a magnitude equalled once in 100 years).

Bulk sewage sludge is sewage sludge that is not sold or given way in a bag or other container for application to the land.

Contaminate an aquifer means to introduce a substance that causes the maximum contaminant level for nitrate in 40 CFR §141.11 to be exceeded in ground water or that causes the existing concentration of nitrate in ground water to increase when the existing concentration of nitrate in the ground water exceeds the maximum contaminant level for nitrate in 40 CFR §141.11.

Class I sludge management facility is any publically owned treatments works (POTW), as defined in 40 CFR §501.2, required to have an approved pretreatment program under 40 CFR §403.8 (a) (including any POTW located in a State that has elected to assume local program responsibilities pursuant to 40 CFR §403.10 (e) and any treatment works treating domestic sewage, as defined in 40 CFR §122.2, classified as a Class I sludge management facility by the EPA Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the State Director, because of the potential for sewage sludge use or disposal practice to affect public health and the environmental adversely.

Control efficiency is the mass of a pollutant in the sewage sludge fed to an incinerator minus the mass of that pollutant in the exit gas from the incinerator stack divided by the mass of the pollutant in the sewage sludge fed to the incinerator.

Cover is soil or other material used to cover sewage sludge placed on an active sewage sludge unit.

Cover crop is a small grain crop, such as oats, wheat, or barley, not grown for harvest.

Cumulative pollutant loading rate is the maximum amount of an inorganic pollutant that can be applied to an area of land.

Density of microorganisms is the number of microorganisms per unit mass of total solids (dry weight) in the sewage sludge.

Dispersion factor is the ratio of the increase in the ground level ambient air concentration for a pollutant at or beyond the property line of the site where the sewage sludge incinerator is located to the mass emission rate for the pollutant from the incinerator stack.

Displacement is the relative movement of any two sides of a fault measured in any direction.

Domestic septage is either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

Domestic sewage is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

Dry weight Basis means calculated on the basis of having been dried at 105 degrees Celsius (°C) until reaching a constant mass (i.e., essentially 100 percent solids content).

Fault is a fracture or zone of fractures in any materials along which strata on one side are displaced with respect to strata on the other side.

Feed crops are crops produced primarily for consumption by animals.

Fiber crops are crops such as flax and cotton.

Final cover is the last layer of soil or other material placed on a sewage sludge unit at closure.

Fluidized bed incinerator is an enclosed device in which organic matter and inorganic matter in sewage sludge are combusted in a bed of particles suspended in the combustion chamber gas.

Food crops are crops consumed by humans. These include, but are not limited to fruits, vegetables, and tobacco.

Forest is a tract of land thick with trees and underbrush.

Ground water is water below the land surface in the saturated zone.

Holocene time is the most recent epoch of the Quaternary period, extending from the end of the Pleistocene epoch to the present.

Hourly average is the arithmetic mean of all measurements, taken during an hour. At least two measurements must be taken during the hour.

Incineration is the combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.

Industrial wastewater is wastewater generated in a commercial or industrial process.

Land application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

Land with a high potential for public exposure is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

Land with a low potential for public exposure is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

Leachate collection system is a system or device installed immediately above a liner that is designed, constructed, maintained, and operated to collect and remove leachate from a sewage sludge unit.

Liner is soil or synthetic material that has a hydraulic conductivity of 1×10^{-7} centimeters per second or less.

Lower explosive limit for methane gas is the lowest percentage of methane gas in air, by volume, that propagates a flame at 25 degrees Celsius and atmospheric pressure.

Monthly average (Incineration) is the arithmetic mean of the hourly averages for the hours a sewage sludge incinerator operates during the month.

Monthly average (Land Application) is the arithmetic mean of all measurements taken during the month.

Municipality means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal Agency of two or more of the foregoing entities) created by or under State law; an Indian tribe or

an authorized Indian tribal organization having jurisdiction over sewage sludge management; or a designated and approved management Agency under section 208 of the CWA, as amended. The definition includes a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of sewage sludge.

Other container is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

Pasture is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

Permitting authority is either EPA or a State with an EPA-approved sludge management program.

Person is an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Person who prepares sewage sludge is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

pH means the logarithm of the reciprocal of the hydrogen ion concentration. A measure of the acidity or alkalinity of a liquid or solid material.

Place sewage sludge or sewage sludge placed means disposal of sewage sludge on a surface disposal site.

Pollutant (as defined in sludge disposal requirements) is an organic substance, an inorganic substance, a combination or organic and inorganic substances, or pathogenic organism a that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction) or

physical deformations in either organisms or offspring of the organisms.

Pollutant limit (for sludge disposal requirements) is a numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge (e.g., milligrams per kilogram of total solids); the amount of pollutant that can be applied to a unit area of land (e.g., kilogram per hectare); or the volume of a material that can be applied to a unit area of land (e.g., gallons per acre).

Public contact site is a land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

Qualified ground-water scientist is an individual with a baccalaureate or post-graduate degree in the natural sciences or engineering who has sufficient training and experience in ground-water hydrology and related fields, as may be demonstrated by State registration, professional certification, or completion of accredited university programs, to make sound professional judgments regarding ground-water monitoring, pollutant fate and transport, and corrective action.

Range land is open land with indigenous vegetation.

Reclamation site is drastically disturbed land that is reclaimed using sewage sludge. This includes, but is not limited to, strip mines and construction sites.

Risk specific concentration is the allowable increase in the average daily ground level ambient air concentration for a pollutant from the incineration of sewage sludge at or beyond the property line of the site where the sewage sludge incinerator is located.

Runoff is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off the land surface.

Seismic impact zone is an area that has a 10 percent or greater probability that the horizontal ground level acceleration to the rock in the area exceeds 0.10 gravity once in 250 years.

Sewage sludge is a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not

include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in treatment works.

Sewage sludge feed rate is either the average daily amount of sewage sludge fired in all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located for the number of days in a 365 day period that each sewage sludge incinerator operates, or the average daily design capacity for all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located.

Sewage sludge incinerator is an enclosed device in which only sewage sludge and auxiliary fuel are fired.

Sewage sludge unit is land on which only sewage sludge is place for final disposal. This does not include land on which sewage sludge is either stored or treated. Land does not include waters of the United States, as defined in 40 CFR §122.2.

Sewage sludge unit boundary is the outermost perimeter of an active sewage sludge unit.

Specific oxygen uptake rate (SOUR) is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in sewage sludge.

Stack height is the difference between the elevation of the top of a sewage sludge incinerator stack and the elevation of the ground at the base of the stack when the difference is equal to or less than 65 meters. When the difference is greater than 65 meters, stack height is the creditable stack height determined in accordance with 40 CFR §51.100(ii).

State is one of the Unites States of America, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and an Indian Tribe eligible for treatment as a State pursuant to regulations promulgated under the authority of section 518(e) of the CWA.

Store or storage of sewage sludge is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

Surface disposal site is an area of land that contains one or more active sewage sludge units.

Total hydrocarbons means the organic compounds in the exit gas from a sewage sludge incinerator stack measured using a flame ionization detection instrument referenced to propane.

Total solids are the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105 degrees Celsius.

Treat or treatment of sewage sludge is the preparation of sewage sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge. This does not include storage of sewage sludge.

Treatment works is either a federally owned, publicly owned, or privately owned device or system use to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

Unstable area is land subject to natural or human-induced forces that may damage the structural components of an active sewage sludge unit. This includes, but is not limited to, land on which the soils are subject to mass movement.

Unstabilized solids are organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents.

Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air.

Wet electrostatic precipitator is an air pollution control device that uses both electrical forces and water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

Wet scrubber is an air pollution control device that uses water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

3. THE COMMONLY USED ABBREVIATIONS ARE LISTED BELOW.

BOD	Five-day biochemical oxygen demand unless otherwise specified
CBOD	Carbonaceous BOD

COD	Chemical oxygen demand
CFS	Cubic feet per second
Chlorine	
Cl_2	Total residual chlorine
TRC	Total residual chlorine which is a combination of free available chlorine (FAC, see below) and combined chlorine (chloramines, etc.)
TRO	Total residual chlorine in marine waters where halogen compounds are present FAC Free available chlorine (aqueous molecular chlorine, hypochlorous acid, and hypochlorite ion)
Coliform	
Coliform, Fecal	Total fecal coliform bacteria
Coliform, Total	Total coliform bacteria
Cont. (Continuous)	Continuous recording of the parameter being monitored, i.e.: flow, temperature, pH, etc.
cu. M/day or M^3/day	Cubic Meters per Day
DO	Dissolved Oxygen
kg/day	Kilograms per Day
lbs/day	Pounds per Day
mg/l	Milligram(s) per Liter
ml/l	Milliliter(s) per Liter
MGD	Million Gallons per Day

Nitrogen	
Total N	Total nitrogen
NH_3-N	Ammonia nitrogen as nitrogen
NO_3-N	Nitrate nitrogen as nitrogen
NO_2-N	Nitrite nitrogen as nitrogen
NO_3-NO_2	Combined nitrate and nitrite nitrogen as nitrogen
TKN	Total Kjeldahl nitrogen as nitrogen
Oil & Grease	Freon extractable material
PCB	Polychlorinated biphenyl
pH	A measure of the hydrogen ion concentration. A measure of alkalinity of a liquid or solid material.
Surfactant	Surface-active agent
Temp. ^oC	Temperature in degrees Centigrade
Temp. ^oF	Temperature in degrees Fahrenheit
TOC	Total organic carbon
Total P	Total phosphorus
TSS or NFR	Total suspended solids or total nonfilterable residue
Turb. or Turbidity	Turbidity measured by the Nephelometric Method (NTU)
ug/l	Micrograms per liter

WET	"Whole Effluent Toxicity" is the total effect of an effluent measured directly with a toxicity test.
C-NOEC	"Chronic [Long-term Exposure Test]-No Observed Effect Concentration". The highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation.
A-NOEC	"Acute [Short-term Exposure Test]-No Observed Effect Concentration". See C-NOEC definition.
LC-50	LC-50 is the concentration of a sample that causes mortality of 50% of the test population at a specific time of observation. The LC-50 = 100% is defined as a sample of undiluted effluent.
ZID	Zone of Initial Dilution means the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports.

HEARING REQUESTS

If you wish to contest any of the provisions of this permit you may request a formal hearing within 30 days of receipt of this letter. The request should be submitted to the Regional Hearing Clerk at the following address:

Regional Hearing Clerk
U.S. Environmental Protection Agency
Office of Regional Counsel (RRC)
John F. Kennedy Federal Building
Room 2203
Boston, MA 02203

Any request for a formal hearing must conform to the requirements of 40 C.F.R. §124.74 (b) and (c). You should also be aware that no issues can be raised at a hearing that were not previously raised on the draft permit unless good cause is shown. See 40 C.F.R. §124.76.

Copies of 40 C.F.R. §§124.74 and 124.76 are enclosed for your information.

STAYS OF NPDES PERMITS

NEW SOURCE, NEW DISCHARGER, RECOMMENCING DISCHARGER

Should the Agency receive and grant a request for a formal hearing, you shall be without a permit pending final Agency action, unless an order authorizing operation is obtained from the Presiding Officer, in accordance with the provisions of 40 C.F.R. §§124.16 (a)(1) and 124.60 (a)(1) and (2).

EXISTING SOURCES

Should the Agency receive and grant a request for a formal hearing, the contested provisions of the permit will be stayed and will not become effective until the administrative review process is completed, in accordance with 40 C.F.R. §§124.16 and 124.60(c). All uncontested provisions of the permit will be effective and enforceable in accordance with the provisions of 40 C.F.R. §124.60(c)(5).

Copies of 40 C.F.R. §§124.16 and 124.60 are enclosed for your information.

§ 124.16 Stays of contested permit conditions.

(a) *Stays.* (1) If a request for review of a RCRA or UIC permit under § 124.19 or an NPDES permit under § 124.74 or § 124.114 is granted or if conditions of a RCRA or UIC permit are consolidated for reconsideration in an evidentiary hearing on an NPDES permit under §§ 124.74, 124.82 or 124.114, the effect of the contested permit conditions shall be stayed and shall not be subject to judicial review pending final agency action. (No stay of a PSD permit is available under this section.) If the permit involves a new facility or new injection well, new source, new discharger or a recommencing discharger, the applicant shall be without a permit for the proposed new facility, injection well, source or discharger pending final agency action. See also § 124.60.

(2) Uncontested conditions which are not severable from those contested shall be stayed together with the contested conditions. Stayed provisions of permits for existing facilities, injection wells, and sources shall be identified by the Regional Administrator. All other provisions of the permit for the existing facility, injection well, or source shall remain fully effective and enforceable.

(b) *Stays based on cross effects.* (1) A stay may be granted based on the grounds that an appeal to the Administrator under § 124.19 of one permit may result in changes to another EPA-issued permit only when each of the permits involved has been appealed to the Administrator and he or she has accepted each appeal.

(2) No stay of an EPA-issued RCRA, UIC, or NPDES permit shall be granted based on the staying of any State-issued permit except at the discretion of the Regional Administrator and only upon written request from the State Director.

(c) Any facility or activity holding an existing permit must:

(1) Comply with the conditions of that permit during any modification or revocation and reissuance proceeding under § 124.5; and

(2) To the extent conditions of any new permit are stayed under this section, comply with the conditions of the existing permit which correspond to the stayed conditions, unless compliance with the existing conditions would be technologically incompatible with compliance with other conditions of the new permit which have not been stayed.

§ 124.60 Issuance and effective date and stays of NPDES permits.

In addition to the requirements of § 124.15, the following provisions apply to NPDES permits and to RCRA or UIC permits to the extent those permits may have been consolidated with an NPDES permit in a formal hearing:

(a)(1) If a request for a formal hearing is granted under § 124.75 or § 124.114 regarding the initial permit issued for a new source, a new discharger, or a recommencing discharger, or in a petition for review of the denial of a request for a formal hearing with respect to such a permit is timely filed with the Administrator under § 124.91, the applicant shall be without a permit pending final Agency action under § 124.91.

(2) Wherever a source subject to this paragraph has received a final permit under § 124.15 which is the subject of a hearing request under § 124.74 or a formal hearing under § 124.75, the Presiding Officer, on motion by the source, may issue an order authorizing it to begin operation before final agency action if it complies with all conditions of that final permit during the period until final agency action. The Presiding Officer may grant such a motion in any case where no party opposes it, or, if a party opposes the motion, where the source demonstrates that (i) it is likely to prevail on the merits; (ii) irreparable harm to the environment will not result pending final agency action if it is allowed to commence operations before final agency action; and (iii) the public interest requires that the source be allowed to commence operations. All the conditions of any permit covered by that order shall be fully effective and enforceable.

(b) The Regional Administrator, at any time prior to the rendering of an initial decision in a formal hearing on a permit, may withdraw the permit and prepare a new draft permit under § 124.6 addressing the portions so withdrawn. The new draft permit shall proceed through the same process of public comment and opportunity for a public hearing as would apply to any other draft permit subject to this Part. Any portions of the permit which are not withdrawn and which are not stayed under this section shall remain in effect.

(c)(1) If a request for a formal hearing is granted in whole or in part under § 124.75 regarding a permit for an existing source, or if a petition for review of the denial of a request for a formal hearing with respect to that permit is timely filed with the Administrator under § 124.91, the force and effect of the contested conditions of the final permit shall be stayed. The Regional Administrator shall notify, in accordance with § 124.75, the discharger and all parties of the uncontested conditions of the final permit that are enforceable obligations of the discharger.

(2) When effluent limitations are contested, but the underlying control technology is not, the notice shall identify the installation of the technology in accordance with the permit compliance schedules (if uncontested) as an uncontested, enforceable obligation of the permit.

(3) When a combination of technologies is contested, but a portion of the combination is not contested, that portion shall be identified as uncontested if compatible with the combination of technologies proposed by the requester.

(4) Uncontested conditions, if inseverable from a contested condition, shall be considered contested.

(5) Uncontested conditions shall become enforceable 30 days after the date of notice under paragraph (c)(1) of this section granting the request. If, however, a request for a formal hearing on a condition was denied and the denial is appealed under § 124.91, then that condition shall become enforceable upon the date of the notice of the Administrator's decision on the appeal if the denial is affirmed, or shall be stayed, in accordance with this section, if the Administrator reverses the denial and grants the evidentiary hearing.

(6) Uncontested conditions shall include:

(i) Preliminary design and engineering studies or other requirements necessary to achieve the final permit conditions which do not entail substantial expenditures;

(ii) Permit conditions which will have to be met regardless of which party prevails at the evidentiary hearing;

(iii) When the discharger proposed a less stringent level of treatment than that contained in the final permit, any permit conditions appropriate to meet the levels proposed by the discharger, if the measures required to attain that less stringent level of treatment are consistent with the measures required to attain the limits proposed by any other party; and

(iv) Construction activities, such as segregation of waste streams or installation of equipment, which would partially meet the final permit conditions and could also be used to achieve the discharger's proposed alternative conditions.

(d) If at any time after a hearing is granted and after the Regional Administrator's notice under paragraph (c)(1) of this section it becomes clear that a permit requirement is no longer contested, any party may request the Presiding Officer to issue an order identifying the requirements as uncontested. The requirement identified in such order shall become enforceable 30 days after the issuance of the order.

(e) When a formal hearing is granted under § 124.75 on an application for a renewal of an existing permit, all provisions of the existing permit as well as uncontested provisions of the new permit, shall continue fully enforceable and effective until final agency action under § 124.91. (See § 122.6) Upon written request from the applicant, the Regional Administrator may delete requirements from the existing permit which unnecessarily duplicate uncontested provisions of the new permit.

(f) When issuing a finally effective NPDES permit the conditions of which were the subject of a formal hearing under Subparts E or F, the Regional Administrator shall extend the permit compliance schedule to the extent required by a stay under this section provided that no such extension shall be granted which would:

(1) Result in the violation of an applicable statutory deadline, or

(2) Cause the permit to expire more than 5 years after issuance under § 124.15(a).

Note.—Extensions of compliance schedules under § 124.60(f)(2) will not automatically be granted for a period equal to the period the stay is in effect for an effluent limitation. For example, if both the Agency and the discharger agree that a certain treatment technology is required by the CWA where guidelines do not apply, but a hearing is granted to consider the effluent limitations which the technology will achieve, requirements regarding installation of the underlying technology will not be stayed during the hearing. Thus, unless the hearing extends beyond the final compliance date in the permit, it will not ordinarily be necessary to extend the compliance schedule. However, where application of an underlying technology is challenged, the stay for installation requirements relating to that technology would extend for the duration of the hearing.

(g) For purposes of judicial review under CWA section 509(b), final agency action on a permit does not occur unless and until a party has exhausted its administrative remedies under Subparts E and F and § 124.91. Any party which neglects or fails to seek review under § 124.91 thereby waives its opportunity to exhaust available agency remedies.

§ 124.74 Requests for evidentiary hearing.

(a) Within 30 days following the service of notice of the Regional Administrator's final permit decision under § 124.15, any interested person may submit a request to the Regional Administrator under paragraph (b) of this section for an evidentiary hearing to reconsider or contest that decision. If such a request is submitted by a person other than the permittee, the person shall simultaneously serve a copy of the request on the permittee.

(b)(1) In accordance with § 124.76, such requests shall state each legal or factual question alleged to be at issue, and their relevance to the permit decision, together with a designation of the specific factual areas to be adjudicated and the hearing time estimated to be necessary for adjudication. Information supporting the request or other written documents relied upon to support the request shall be submitted as required by § 124.73 unless they are already part of the administrative record required by § 124.18.

Note.—This paragraph allows the submission of requests for evidentiary hearings even though both legal and factual issues may be raised, or only legal issues may be raised. In the latter case, because no factual issues were raised, the Regional Administrator would be required to deny the request. However, on review of the denial the Administrator is authorized by § 124.91(a)(1) to review policy or legal conclusions of the Regional Administrator. EPA is requiring an appeal to the Administrator even of purely legal issues involved in a permit decision to ensure that the Administrator will have an opportunity to review any permit before it will be final and subject to judicial review.

(2) Persons requesting an evidentiary hearing on an NPDES permit under this section may also request an evidentiary hearing on a RCRA or UIC permit. PSD permits may never be made part of an evidentiary hearing under Subpart E. This request is subject to all the requirements of paragraph (b)(1) of this section and in addition will be granted only if:

(i) Processing of the RCRA or UIC permit at issue was consolidated with the processing of the NPDES permit as provided in § 124.4;

(ii) The standards for granting a hearing on the NPDES permit are met;

(iii) The resolution of the NPDES permit issues is likely to make necessary or appropriate modification of the RCRA or UIC permit; and

(iv) If a PSD permit is involved, a permittee who is eligible for an evidentiary hearing under Subpart E on his or her NPDES permit requests that the formal hearing be conducted under the procedures of Subpart F and the Regional Administrator finds that consolidation is unlikely to delay final permit issuance beyond the PSD one-year statutory deadline.

(c) These requests shall also contain:

(1) The name, mailing address, and telephone number of the person making such request;

(2) A clear and concise factual statement of the nature and scope of the interest of the requester;

(3) The names and addresses of all persons whom the requester represents; and

(4) A statement by the requester that, upon motion of any party granted by the Presiding Officer, or upon order of the Presiding Officer *sua sponte* without cost or expense to any other party, the requester shall make available to appear and testify, the following:

(i) The requester;

(ii) All persons represented by the requester; and

(iii) All officers, directors, employees, consultants, and agents of the requester and the persons represented by the requester.

(5) Specific references to the contested permit conditions, as well as suggested revised or alternative permit conditions (including permit denials) which, in the judgment of the requester, would be required to implement the purposes and policies of the CWA.

(6) In the case of challenges to the application of control or treatment technologies identified in the statement of basis or fact sheet, identification of the basis for the objection, and the alternative technologies or combination of technologies which the requester believes are necessary to meet the requirements of the CWA.

(7) Identification of the permit obligations that are contested or are inseverable from contested conditions and should be stayed if the request is granted by reference to the particular contested conditions warranting the stay.

(8) Hearing requests also may ask that a formal hearing be held under the procedures set forth in Subpart F. An applicant may make such a request even if the proceeding does not constitute "initial licensing" as defined in § 124.111.

(d) If the Regional Administrator grants an evidentiary hearing request in whole or in part, the Regional Administrator shall identify the permit conditions which have been contested by the requester and for which the evidentiary hearing has been granted. Permit conditions which are not contested or for which the Regional Administrator has denied the hearing request shall not be affected by, or considered at, the evidentiary hearing. The Regional Administrator shall specify these conditions in writing in accordance with § 124.60(c).

(e) The Regional Administrator must grant or deny all requests for an evidentiary hearing on a particular permit. All requests that are granted for a particular permit shall be combined in a single evidentiary hearing.

(f) The Regional Administrator (upon notice to all persons who have already submitted hearing requests) may extend the time allowed for submitting hearing requests under this section for good cause.

§ 124.76 Obligation to submit evidence and raise issues before a final permit is issued.

No evidence shall be submitted by any party to a hearing under this Subpart that was not submitted to the administrative record required by § 124.18 as part of the preparation of an comment on a draft permit, unless good cause is shown for the failure to submit it. No issues shall be raised by any party that were not submitted to the administrative record required by § 124.18 as part of the preparation of and comment on a draft permit unless good cause is shown for the failure to submit them. Good cause includes the case where the party seeking to raise the new issues or introduce new information shows that it could not reasonably have ascertained the issues or made the information available within the time required by § 124.15; or that it could not have reasonably anticipated the relevance or materiality of the information sought to be introduced. Good cause exists for the introduction of data available on operation authorized under § 124.60(a)(2).

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
603-271-3503 FAX 603-271-2867
TDD Access: Relay NH 1-800-735-2964

September 30, 1993

Mr. Edward K. McSweeney, Chief
Wastewater Management Branch
U.S. Environmental Protection Agency
JFK Federal Building-WMN
Boston, Massachusetts 02203

Subject: Conditional Certification of NPDES Permit Reissuance
North Atlantic Energy Service Corporation, Seabrook
NPDES/State Permit No. NH0020338

Dear Mr. McSweeney:

By letter dated August 23, 1993, the U.S. Environmental Protection Agency (EPA) requested State Certification of the NPDES Permit proposed to be reissued to North Atlantic Energy Service Corporation (NAESCO).

After appropriate staff review of the draft permit and the public comments, State Certification is hereby granted pursuant to Section 401 of the Clean Water Act.

The certification is conditional on the following change being made to our State Permit Condition:

1. The last sentence in state permit condition I.F.2. should read "In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit, *if adopted as a state permit,* shall remain in full force and effect under State law as a permit issued by the State of New Hampshire.

Since a NAESCO letter to EPA dated September 13, 1993 requests changes to the permit that relate to New Hampshire's statutes or our surface water quality regulations, the certification is also conditional on the following:

2. The requested change in the total residual chlorine limit for outfall 002A from 0.0075 mg/l monthly average and 0.013 mg/l daily maximum to 0.05 mg/l for both the monthly average and the daily maximum should not be granted since these limits are necessary to insure that the marine criteria for chlorine are met in the discharge to the Brown's River. Note that it should be explained in footnote e. that until such time as an EPA approved method for chlorine with a lower detection level is developed, that the 0.05 mg/l detection level for the low-level amperometric titration method (method 4500-CL E in Standard Methods) will be the compliance point.

3. In footnote e. on page 13 of 25, the requested change from chlorine method 4500-CL E to 4500 CL D for outfall 002A should not be granted since the method with the lowest detection limit is necessary to evaluate compliance with the chlorine criteria.

4. For outfall 021 (page 15), since the 50 mg/l maximum day TSS limit is a State certification requirement for sanitary wastewater treatment facilities, the requested higher limit of 100 mg/l should not be granted. Similarly, since New Hampshire RSA 485-A:8, VII (a) requires "For sewage, secondary treatment and disinfection as necessary to comply with water quality standards" and since secondary treatment means 30 mg/l BOD and TSS on a monthly average basis as per 40 CFR 133.102, the requested change in the monthly average TSS limit from 30 mg/l to 50 mg/l should also not be granted.

5. The requested change in footnote b. on pH to add the words "within 0.5 standard units" which appears on pages 9 of 25 (outfall 001), 13 of 25 (outfall 002A), 15 of 25 (outfall 021) and 20 of 25 (outfall 003) should not be granted since there is no basis for this statement in either our statutes or our regulations.

Upon final issuance by the federal EPA, the Department of Environmental Services may adopt the permit, including all terms and conditions, as a state permit pursuant to RSA 485-A:13.

Sincerely,

Edward J. Schmidt

Edward J. Schmidt, P.E., Ph.D.
Director
Water Supply & Pollution Control Division

EJS/jga55

cc: Ted Landry, EPA-Boston
R. Jeb DeLoach, Executive Director, NAESCO
Mr. Ted C. Feigenbaum, V.P., NAESCO
Peter S. Helm, NH Coastal Program-OSP