



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

October 27, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

RECEIVED

NOV - 1 1993

R.G.C.

Mr. R.G. Chevalier, Vice President
Northeast Utilities
P.O. Box 270
Hartford, Connecticut 06141-0270

Re: NPDES Permit NH0001465 - PSNH Merrimack Station

Dear Mr. Chevalier:

On October 14, 1993, in a phone conversation to Dr. Nicholas Prodany of my staff, Mr. Allan Palmer of your staff requested an increase in the average monthly flow rate for Outfall 003A. This outfall is for effluent from the Ash Settling Pond - during routine operation. The current permitted limit for the average monthly flow rate is 9.0 MGD. The request was for an approximate ten (10) percent increase or a flow rate of 10.0 MGD. This request has been made because the Station is currently using a low sulfur-content coal which has a higher fusion point than most of the coals previously used. This higher fusion point necessitates greater amounts of water for quenching and sluicing of the slag from the boilers.

With a general increase of precipitation during the Spring season, a definite potential exists that the permitted average monthly flow rate of 9.0 MGD will be exceeded, although the daily maximum value of 19.1 MGD will not be exceeded.

In compliance with permit requirements, this Station plans to separate the ash settling pond from the nearby wetlands in 1994. Therefore, EPA anticipates this projected minor exceedence to the permit limits will be corrected in 1994. Moreover, this increase in flow rate will not cause a significant change to the established average copper-concentration of 0.0053 mg/l during routine discharges from Outfall 003A. This average copper-concentration at the weir discharge is based on data taken over the past three years, i.e. from 12/12/90 to 5/21/93. For reference purposes, the effluent permit limitation for copper at Outfall 003A is 0.2 mg/l.

This potentially minor exceedence in flow will not cause a detectable change in State water quality standards.

EPA considers this change acceptable and will include it in the next permit modification or permit reissuance which ever occurs first.

Should you have any questions, please contact Dr. Prodany of my staff at 617-565-3587.

Sincerely,


Edward K. McSweeney, Chief
Wastewater Management Branch

cc: A.Palmer - PSNH
J.Andrews - NHDES
D.Starr - NHDES
S.Silva - EPA, Compliance





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



November 4, 1992

Mr. Earl G. Legacy, Vice President
Public Service of New Hampshire
1000 Elm Street
Manchester, N.H. 03105

Subject: Modification of State Discharge Permit
PSNH Merrimack Station, Bow

Dear Mr. Legacy:

The purpose of this letter is to inform you that the minor modification of your NPDES Permit provided in the U.S. Environmental Protection Agency's letter to you dated October 22, 1992 is also considered a modification of your State discharge permit.

The enclosed copies of modified pages 11 through 14 and 21 should replace the like pages in your State Permit.

If you have any questions relative to your State discharge permit do not hesitate to call Jeff Andrews of my staff at the Water Supply and Pollution Control Division at 271-2457.

Very truly yours,

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

CERTIFIED MAIL #P268 799 722
JGA/j1/197

cc: Dennis R. Brown, PSNH Manchester, Director of Production
Allen G. Palmer, PSNH Manchester, Senior Engineer
Harold Keyes, PSNH Bow, Station Manager

enclosure

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NOV 12 1992

PRODUCTION DIV.

AIR RESOURCES DIV.
64 No. Main Street
Caller Box 2033
Concord, N.H. 03302-2033
Tel. 603-271-1370
Fax 603-271-1381

WASTE MANAGEMENT DIV.
6 Hazen Drive
Concord, N.H. 03301
Tel. 603-271-2900
Fax 603-271-2456

WATER RESOURCES DIV.
64 No. Main Street
P.O. Box 2008
Concord, N.H. 03302-2008
Tel. 603-271-3406
Fax 603-271-1381

WATER SUPPLY & POLLUTION CONTROL DIV.
P.O. Box 95
Concord, N.H. 03302-0095
Tel. 603-271-3503
Fax 603-271-2181

MK-19-216-DNH-00000006

A. Palmer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

OCT 22 92

Mr. E. G. Legacy, Vice President
PSNH Merrimack Station
1000 Elm Street
P.O. Box 330
Manchester, NH 03105

Re: NPDES Permit No. NH0001465
Minor Modifications

Dear Mr. Legacy:

Mr. Alan Palmer of your staff and Mr. Jeffrey Andrews of the New Hampshire Department of Environmental Services have brought to our attention several administrative errors in your recently-issued NPDES permit.

These issues can be resolved expediently, since all of them are classified as minor permit modifications, 40 CFR 122.63.

A corrected copy of each modified page is attached for your convenience. The issues identified for correction are as follows:

- 1. Page 11 of 22. There should be a superscript "b" on the "Report" requirement, which refers to subparagraph "b". In this way the reporting requirements are not ambiguous. Currently there is no referenced superscript.
2. Page 12 of 22. The "River Water pH" reporting requirement can be deleted on this page, because it has been specified as a requirement on Page 8 of the permit; and, therefore, it is a redundant requirement.
3. Page 13 of 22. The "River Water pH" reporting requirement can be deleted on this page, because it has been specified as a requirement on Page 8 of the permit; and, therefore, it is a redundant requirement.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

- 4. Page 13 of 22. Footnote "h" should be clarified as follows:
"The permittee shall report in the discharge monitoring reports which of the sumps was discharging at the time of the sample collection."
- 5. Page 14 of 22. Footnote "c" should be clarified as follows:
" Required only when an oil sheen is observed; otherwise report results of observation during rain events."
- 6. Page 21. of 22. The State Permit Condition, Part I.C.1.c. should read as follow: The permittee has determined that there is at least a three hour delay between discharges of treated wastewater from the wastewater treatment basins and the detection of the plume in the ash settling pond outfall. Therefore sampling conducted during chemical cleanings (Outfall 003B) must begin between three and four hours after the discharge from the wastewater treatment basins begin.
(Clarification of the three-hour residence time delay in sampling.)

These changes are effective immediately, unless we receive a written objection within thirty (30) days of your receipt of this letter.

We regret any inconvenience these errors may have caused. If you have any further questions, please contact Nicholas Prodany of my staff at 617-565-3587.

Sincerely,

David A. Fierra, Director
Water Management Division

attachments

cc: A.Palmer, PSNH
J.Andrews, NHDES
R.Harrington, EPA

CONCURRENCES							
SYMBOL	WMN	WMN					
SURNAME	WMP	Landry	ER/WM	for DAF			
DATE	10/21/92	10/21/92	10/21/92				

PART I

Permit No. NH0001465
Page 11 of 22
Minor Modification 10/92

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

6. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 003B: Ash settling pond discharge during chemical cleaning.

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

<u>Affluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (MGD)			Continuous	Continuous
Suspended Solids (mg/l)	30.0	19.1	Daily	Composite
Total Copper (mg/l)		0.077	Daily	Composite
Total Iron (mg/l)	1.0	1.0	Daily	Composite
Oil and Grease (mg/l)	15.0	20.0	Daily ^g	Grab
pH (range, in s.u.)		Report ^b	Continuous	Continuous

- b. Report the maximum and minimum values for the month.
- c. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- d. Chemical cleaning operations shall occur no more than 30 days during each year. The permittee shall notify the Director or designee at least 72 hours in advance of such operations and furnish an estimate of the length of time over which the operation shall occur and the chemicals to be used. Sampling shall begin at least 3 hours after the discharge from the wastewater treatment basins begins (see Parts I.C.1.c. and I.C.1.d.).
- e. The analytical results for each chemical cleaning operation shall be reported on a separate discharge monitoring report form.
- f. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Point of discharge prior to dilution with the circulating cooling water (at the weir).
- g. Required only when an oil sheen is observed; otherwise one grab sample per cleaning event.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

7. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 004 (NB): MK-1 Screen Wash-water; MK-2 Screen Wash-water; MK-1 Screenhouse Floor Sump water; MK-2 Screenhouse Floor Sump water; MK-2 Screenhouse Roof Drain; and Fire Protection Overflow effluent subject to the following conditions: *FIRE HOSE 5 FEET 5*

MK-1

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (GPD)	---	Report	Annual	Estimate- total Grab ^{c,b}
Oil & Grease ^b (mg/l)	---	Report Range	Annual ^d	Grab ^{c,b}
pH ^{b,f} (range, in s.u.)	6.5 - 8.0		Annual	Grab ^{c,b}

NB Designated as Outfall(s) XXX and YYY in Form 2C of Application (5 separate pipes).

- b. Required for State Certification.
- c. Report range of results of grab samples of each of the 5 pipes.
- d. Annual sample only required if oil sheen is observed; otherwise report results of daily observation.
- e. All live fish, shellfish and other organisms collected or trapped on the intake screens should be returned to their habitat, sufficiently distant from the intake structures to prevent re-impingement. All solid materials except for naturally occurring materials such as leaves, branches, grass, and so forth will be removed from the screens shall have land disposal (see Part I.A.C.).
- f. The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., or as naturally occurs in the receiving water (see Part I.C.1.a.).
- g. There shall be no discharge of floating solids, oil sheen or visible foam in other than trace amounts.
- h. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.

PART I

Permit No. NH0001465
 Page 13 of 22
 Minor Modification 10/92

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

8. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 005(NB): MK-1 Maintenance Sump discharge and MK-2 Maintenance Sump discharge subject to the following conditions:

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (GPD)	-----	Report	Once/Annual- Outage	Estimate Total
Oil & Grease ^b (mg/l)		Report Range	Once/Annual ^d - Outage	Grab ^{c,b}
pH ^e (range, in s.u.)	6.5 - 8.0		Once/Annual- Outage	Grab ^{c,b}

NB Designated as Outfall(s) XXX in Form 2C of Application (4 separate pipes).

- b. Required for State Certification.
- c. Report range of results of grab samples of each pipe for which a discharge occurs.
- d. Sampling during the annual outage is only required if an oil sheen is observed; otherwise report the results of daily observation.
- e. The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., or as naturally occurs in the receiving water (see Part I.C.1.a.).
- f. There shall be no discharge of floating solids, oil sheen or visible foam in other than trace amounts.
- g. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.
- h^p. The permittee shall report in the discharge monitoring report which of the sumps was discharging at the time of the sample collection.

PART I

Permit No. NH0001465
 Page 14 of 22
 Minor Modification 10/92

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

9. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 006(NB): Stormwater from the Southeast Yard Drain.
- a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic

	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (GPD)	---	Report ^b	Annual	Estimate
Oil and Grease (mg/l)	---	Report	Annual ^c	Grab
TSS (mg/l)	---	Report	Annual	Grab
pH (range, in s.u.)		Report Range	Annual	4 Grabs

NB Designated as Outfall(s) XXX in Form 2C of Application.

- b. Report actual flow based on annual precipitation data or estimated flow derived from a 10 year, 24 hour rainfall event.
- c. Required only when an oil sheen is observed; otherwise report results of observation during rain events.
- d. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- e. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.

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. Within 30 days of the effective date of the permit, the permittee shall provide representative sampling locations for both Outfalls 001 and 002, upstream of any mixing with the cooling canal.
 - c. The permittee has determined that there is at least a three hour delay between discharges of treated wastewater from the wastewater treatment basins and the detection of the plume in the ash settling pond outfall. Therefore sampling conducted during chemical cleanings (Outfall 003B) must begin between three and four hours after the discharge from the wastewater treatment basins begin.
 - d. Weekend chemical cleaning discharges are prohibited unless provisions are made to allow for the collection by the NHDES of 24 hour composite samples during normal weekday working hours.
 - e. Coal pile runoff discharges to the ash settling basin are prohibited unless treated first in the wastewater treatment facility.
 - f. The permittee is authorized to discharge treated wastewater from the intake dredge de-watering lagoon via two 24 inch pipes. In addition to the conditions described in NH Wetlands Board Permit No. 88-1328 issued on April 30, 1991, or any subsequent revisions, the permittee shall insure that the discharges do not increase the naturally occurring turbidity of the Merrimack River by more than 10 nephelometric turbidity units.
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 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.

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JUL 02 1992



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

NOTED JUL 3 1992 DRB

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 30, 1992

Mr. E. G. Legacy, Vice President
PSNH Merrimack
100 Elm Street
P.O. Box 330
Manchester, NH 03105

RE: NPDES Application No. NH0001465

Dear Mr. Legacy:

Enclosed is your final National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to the referenced application. The Environmental Permit Regulations, at 40 C.F.R. §124.15, 48 Fed. Reg. 14271 (April 1, 1983), 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 Nicholas Prodany of my staff at 617/565-3587.

Sincerely,

Clyde F. Shufelt for

Edward K. McSweeney, Chief
Wastewater Management Branch

Enclosures

cc: State Water Pollution Control Agency
All Interested Parties

RECEIVED AGP

JUL 07 1992

PRODUCTION DIV.



**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. §§1251 et seq.; the "CWA"),

Public Service of New Hampshire
Merrimack Station

is authorized to discharge from the facility located at

Bow, New Hampshire 03301

to receiving waters named:

Merrimack River

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

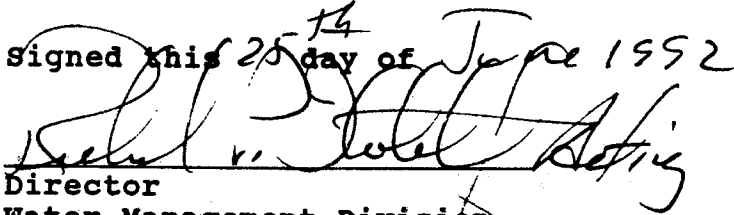
This permit shall become effective (30) thirty days from the date of issuance.

This permit and the authorization to discharge expires (5) five years from the effective date.

This permit supersedes the permit issued on September 30, 1985.

This permit consists of 22 pages in Part I including effluent limitations, monitoring requirements, etc., Attachment I, Location of Sampling Stations, and 22 pages in Part II including General Conditions and Definitions.

Signed this ¹⁴25 day of June 1992


Director
Water Management Division
Environmental Protection Agency
Region I
Boston, MA

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Except as specified in Paragraphs 1 through 19 herein, the permittee shall not discharge to the Merrimack River, a final effluent to which it has added any pollutants.
 - a. Chlorine and bromine may be used as a biocide. No other biocide shall be used without written approval from the Regional Administrator and the Director. The term chlorination will include bromination, if bromine is used. For this permit total residual oxidants (TRO) is synonymous with total residual chlorine (TRC). The chlorination cycle shall not exceed two hours in any one day for any one unit. Simultaneous multi-unit chlorination is not allowed.
 - b. The discharges shall not jeopardize any Class B use of the Merrimack River and shall not violate applicable water quality standards. Pollutants which are not limited by this permit, but which have been specifically disclosed in the permit application, may be discharged at the frequency and level disclosed in the application, provided that such discharge does not violate Section 307 or 311 of the Act or applicable water quality standards.
 - c. All live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens shall be returned to their natural habitat. All solid materials except for naturally occurring materials such as leaves, branches, grass, and so forth, will be removed from the screens and have land disposal.
 - d. This permit shall be modified, revoked or reissued to comply with any applicable effluent standard or limitation issued or approved under Section 301(b)(2)(C) and (D), 304(b)(2), and 207(a)(2) of the Act, 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 Act.

- e. The term "Regional Administrator" means the Regional Administrator of Region I of the U. S. Environmental Protection Agency and the term "Director" means the Director of the Water Supply and Pollution Control Division, New Hampshire Department of Environmental Services.
- f. It has been determined, based on engineering judgement, that the circulating water intake structure presently employs the best technology available for minimizing adverse environmental impact. Any change in the location, design or capacity of the present structure shall be approved by the Regional Administrator and the Director. The present design shall be reviewed for conformity to regulations pursuant to Section 316(b) of the Act when such are promulgated.
- g. The combined thermal plumes for the station shall;
(a) not block zone of fish passage, (b) not change the balanced indigenous population of the receiving water, and (c) have minimal contact with the surrounding shorelines.
- h. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
- i. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR 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. §122.21(g)(7); or
 - (d) Any other notification level established by the Director in accordance with 40 C.F.R. §122.44(f) and New Hampshire regulations.
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. §122.21(g)(7); or
 - (d) Any other notification level established by the Director in accordance with 40 C.F.R. §122.44(f) and New Hampshire regulations.
- j. Water drawn from fuel oil tanks shall not be discharged into the Merrimack River.
- k. There are two (2) discharges which are not covered by this NPDES permit and are permitted by the following regulatory agencies: New Hampshire Department of Environmental Services - Wetlands Board and the U.S. Army Corps of Engineers. As a cautionary note, these discharges must satisfy New Hampshire Water Quality Standards (see Part I.C.1.f.).

- l. Conceptual plans for the necessary construction associated with the segregation of the ash settling pond from the nearby wetlands shall be submitted to the State for approval within one month of the effective date of this permit.
- m. Construction of the required facilities shall begin within 90 days after the permittee is in receipt of all requisite permits or a later date as approved by the EPA and the State. The permittee shall notify EPA and the State within 30 days of receipt of all requisite permits.
- n. All construction required by the plans shall be completed and the facilities placed in operation within 12 months after receipt of all requisite permits or at a later date as may be approved by the Regional Administrator and the Director.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 001: Circulating Cooling Water from the MK-1 condenser outlet.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (MGD)	Report	69.1	Continuous	Calculate ^b
Total Residual Oxidants (mg/l)	----	0.20	Weekly, When in use	Grab

- b. Based on pump curves, hours of pump operation, and 190 feet river levels.
- c. Simultaneous multi-unit chlorination is not allowed. Samples for Total Residual Chlorine measurement shall be taken during the chlorination of circulating water.
- d. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: At a representative point prior to discharge into the cooling canal, see Part c.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 002: Circulating Cooling Water from the MK-2 condenser outlet.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (MGD)	Report	187.2	Continuous	Calculate ^b
Total Residual Oxidants (mg/l)	----	0.20	Weekly, When in use	Grab

- b. Based on pump curves, hours of pump operation, and 190 feet river levels.
- c. Simultaneous multi-unit chlorination is not allowed. Samples for Total Residual Chlorine measurement shall be taken during the chlorination of circulating water.
- d. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: At a representative point prior to discharge into the cooling canal, see Part c.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 003: Circulating Cooling Water (001 & 002) including Ash Settling Pond Discharge (003A/003B), and West Yard Drain.
- a. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	265.3	275.4	Continuous	Calculate (@ 190' elevation)
Oil and Grease ^h (mg/l)	---	Report	Monthly ^g	Grab
Dissolved Oxygen (% Saturation)	---	75 (minimum)	Monthly	Grab
Total Residual Oxidants ¹ (mg/l)	---	0.026 ²	Monthly ⁱ , When in use.	Grab
pH ^c (range, in s.u.)		6.5-8.0 ^h	Continuous	Continuous
N-5, River Water pH (range, in s.u.)		Report Range	Continuous	Continuous

- b. Simultaneous multi-unit chlorination is not allowed.
- c. The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., or shall be as naturally occurs in the receiving water. The discharge pH shall be monitored continuously (see Parts I.A.12.a. and I.C.1.a.).
- d. There shall be no discharge of oil sheen, floating solids, or visible foam in other than trace amounts.
- e. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: At a representative point prior to discharge of the cooling canal into the receiving water.
- f. Temperature - See Paragraph 11, page 16 of 22, for "Temperature Monitoring and Power Spray Module (PSM) Operation".
- g. Required only when oil sheen is observed; otherwise report results based on daily observations.
- h. Required for State certification.
- i. Based on a review of the monitoring data collected during the first 12 months at Outfall 003, the monitoring frequency and testing requirements may be reduced, if the test results are consistently below the minimum level (ML).

SEE PAGE 9 OF 22 FOR AN EXPLANATION OF THE NUMERICAL SUPERSCRIPITS

EXPLANATION OF THE NUMERICAL SUPERSCRIPTS USED ON PAGE 8 OF 22 OF THE PERMIT.

- (1) The preferred method of analysis for Total Residual Chlorine is the Low-Level Amperometric Titration Method using a chart recorder if possible. The EPA approved method is found in Standard Methods for the Examination of Water and Wastewater, 17th Edition, Method 4500-CL E

An alternate method of analysis for Total Residual Chlorine is the DPD spectrophotometric, using a longer cell (e.g. 5 cm. to 10 cm. if possible). The EPA approved method (EPA no. 330.5) is found in Standard Methods for the Examination of Water and Wastewater, 17th Edition, Method no. 4500-Cl G or 408E (16th ed.).

- (2) For this permit, the minimum level (ML) for Total Residual Chlorine (TRC) has been defined as 0.05 mg/l (50 ug/l) and that the value will be reduced as more sensitive test methods are approved by the EPA and the State of New Hampshire. A non-detect can only be a value below the ML of 50 ug/l. A result of a non-detect or a value of 50 ug/l will be considered in compliance with the permit limits. Values greater than 50 ug/l will be considered in non-compliance with the permit limits for TRC.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

5. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 003A: Ash Settling Pond Discharge during routine operation.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (MGD)	9.0	19.1	Continuous	Continuous
Oil and Grease (mg/l)	15.0	20.0	Monthly	Grab
Suspended Solids (mg/l)	30.0	100.0	Monthly	Grab
Total Copper (mg/l)	----	0.20	Quarterly	Grab
Total Iron (mg/l)	----	1.0	Quarterly	Grab
pH (range, in s.u.)	Report		Continuous	Continuous

b. The pH shall be monitored continuously during routine operations. Report the maximum and minimum values for the month.

c. There shall be no discharge of oil sheen, floating solids, or visible foam in other than trace amounts.

d. All routine analyses for each month will be grouped and reported on a single discharge monitoring report form.

e. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Point of discharge prior to dilution with the circulating cooling water (at the weir).

f. See Part I.C.1.e. on coal pile runoff discharges to ash settling pond.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

6. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 003B: Ash settling pond discharge during chemical cleaning.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (MGD)			Continuous	Continuous
Suspended Solids (mg/l)	30.0	19.1	Daily	Composite
Total Copper (mg/l)		100.0	Daily	Composite
Total Iron (mg/l)	1.0	0.077	Daily	Composite
Oil and Grease (mg/l)	15.0	1.0	Daily ⁹	Composite
pH (range, in s.u.)		20.0	Continuous	Grab
		Report	Continuous	Continuous

- b. Report the maximum and minimum values for the month.
- c. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- d. Chemical cleaning operations shall occur no more than 30 days during each year. The permittee shall notify the Director or designee at least 72 hours in advance of such operations and furnish an estimate of the length of time over which the operation shall occur and the chemicals to be used. Sampling shall begin at least 3 hours after the discharge from the wastewater treatment basins begins (see Parts I.C.1.c. and I.C.1.d.).
- e. The analytical results for each chemical cleaning operation shall be reported on a separate discharge monitoring report form.
- f. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Point of discharge prior to dilution with the circulating cooling water (at the weir).
- g. Required only when an oil sheen is observed; otherwise one grab sample per cleaning event.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

7. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 004 (NB): MK-1 Screen Wash-water; MK-2 Screen Wash-water; MK-1 Screenhouse Floor Sump water; MK-2 Screenhouse Floor Sump water; MK-2 Screenhouse Roof Drain; and Fire Protection Overflow effluent subject to the following conditions:

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (GPD)	---	Report	Annual	Estimate- total Grab ^{c,b}
Oil & Grease ^b (mg/l)	---	Report Range	Annual ^d	Grab ^{c,b}
pH ^{b,f} (range, in s.u.)	6.5 - 8.0	Report Range	Annual	Grab ^{c,b}
N-5, River Water pH (range, in s.u.)		Report Range	Continuous	Continuous

- NB Designated as Outfall(s) XXX and VVV in Form 2C of Application (5 separate pipes).
- b. Required for State Certification.
- c. Report range of results of grab samples of each of the 5 pipes.
- d. Annual sample only required if oil sheen is observed; otherwise report results of daily observation.
- e. All live fish, shellfish and other organisms collected or trapped on the intake screens should be returned to their habitat, sufficiently distant from the intake structures to prevent re-impingement. All solid materials except for naturally occurring materials such as leaves, branches, grass, and so forth will be removed from the screens shall have land disposal (see Part I.A.c.).
- f. The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., or as naturally occurs in the receiving water (see Part I.C.1.a.).
- g. There shall be no discharge of floating solids, oil sheen or visible foam in other than trace amounts.
- h. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

8. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 005(NB): MK-1 Maintenance Sump discharge and MK-2 Maintenance Sump discharge subject to the following conditions:

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

Effluent Characteristic

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>
	<u>Average Monthly</u>	<u>Daily Maximum</u>	
Flow (GPD)	---	Report	Once/Annual- Outage Estimate Total
Oil & Grease ^b (mg/l)		Report Range	Once/Annual ^c Grab ^{c,b}
pH ^{b,e} (range, in s.u.)	6.5 - 8.0		Once/Annual- Outage Grab ^{c,b}
N-5, River Water pH (range, in s.u.)	Report Range		Continuous Outage Continuous

NB Designated as Outfall(s) XXX in Form 2C of Application (4 separate pipes).

- b. Required for State Certification.
- c. Report range of results of grab samples of each pipe for which a discharge occurs.
- d. Sampling during the annual outage is only required if an oil sheen is observed; otherwise report the results of daily observation.
- e. The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., or as naturally occurs in the receiving water (see Part I.C.1.a.).
- f. There shall be no discharge of floating solids, oil sheen or visible foam in other than trace amounts.
- g. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.
- h^b. The permittee shall report in the discharge monitoring report whether the MK-1 Sump, the MK-2 Sump or both sumps were discharging at the time of the sample collection.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

9. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 006(NB): Stormwater from the Southeast Yard Drain.
- a. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Average Monthly</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (GPD)	---	Report ^b	Annual	Estimate
Oil and Grease (mg/l)	---	Report	Annual ^c	Grab
TSS (mg/l)	---	Report	Annual	Grab
pH (range, in s.u.)		Report Range	Annual	4 Grab

NB Designated as Outfall(s) XXX in Form 2C of Application.

- b. Report actual flow based on annual precipitation data or estimated flow derived from a 10 year, 24 hour rainfall event.
- c. Required only when an oil sheen is observed; otherwise report results of observations during rain events.
- d. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- e. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.

10. Biological Monitoring

a. Downstream Fish Passage Agreement

The New Hampshire Fish & Game Department, the U.S. Fish & Wildlife Service, PSNH, and other Federal and State agencies are currently negotiating an agreement relative to the downstream migration of anadromous fish at several hydroelectric facilities on the Merrimack River. When the agreement is finalized, the technical advisory committee (see Part I.A.15.) may recommend revisions to the fish impingement (Part I.A.10.b.) and pump entrainment (Part I.A.10.c.) monitoring programs described below. Upon approval, by the Regional Administrator and the Director, the revisions shall become an enforceable element of this permit.

b. Impingement Monitoring

1. PSNH shall conduct impingement monitoring at the Merrimack Station when flows from Garvins Falls Station drop below 900 CFS during any period from July 1st through October 15th. Impingement monitoring shall consist of collecting all fish from both MK-1 and MK-2 travelling screen washes during one continuous 48-hour period per week.
2. PSNH shall report in writing to the New Hampshire Fish and Game Department (NHF&GD), U.S. Fish and Wildlife Service (USF&WS), New Hampshire Department of Environmental Services (NHDES), and the U.S. Environmental Protection Agency (USEPA) any extraordinary impingement events (EIE) at Merrimack Station. An extraordinary impingement event is defined as an event when 50 or more fish at any one time, of any size or species, are either distressed or killed as a result of impingement. Twenty-four hour reporting of EIEs will be in accordance with Part II, Section D, Part 1.e, and annual reporting of EIEs in accordance to Paragraph 13.

c. Pump Entrainment Monitoring, American Shad and River Herring Ichthyoplankton

PSNH shall conduct River Herring Ichthyoplankton and American Shad Ichthyoplankton pump entrainment monitoring at the Merrimack Generating Station from June 15th to July 15th when significant

numbers of upstream migrating River Herring and American Shad pass the Hooksett Dam. "Significant" numbers of upstream migrating River Herring and American Shad will be as defined in the downstream fish passage agreement (Part I.A.10.a.). Ichthyoplankton pump entrainment monitoring will be conducted at MK-1 and MK-2 for 24 continuous hours, twice per week.

11. Temperature Monitoring and Power Spray Module (PSM) Operation

a. Continuous River Surface Temperature Monitoring

Continuous river surface temperature monitoring in the vicinity of the Merrimack Generating Station shall be conducted on the following basis. Open-river surface water temperatures will be continuously monitored at control Station N-10, effluent discharge station Zero, and mixing zone Station S-4 (see ATTACHMENT I). The discharge Station Zero temperature monitoring probe will remain in place and in operation year round. Stations N-10 and S-4 temperature monitoring probes will be removed from the river and from operation in the fall when ambient river water temperatures have dropped below 40⁰F (4.4⁰C) and replaced when ambient river water temperatures have risen to above 50⁰F in the spring. Ambient river water temperatures for removal and installation of the probes are defined as measured at Station N-10 for the fall probe removal, and at the Merrimack Station Unit II condenser inlet for the spring probe replacement.

Monitoring program data shall be reported in accordance with Paragraph 13, below.

b. Power Spray Module (PSM) Operation

WHEN MK STA IS OPERATING / GENERATING
The power spray module system shall be operated, as necessary, to maintain either a mixing zone (station S-4) river temperature not in excess of 69⁰F, or a station N-10 to S-4 change in temperature (Delta-T) of not more than 1⁰F when the N-10 ambient river temperature exceeds 68⁰F. All available PSM's shall be operated when the S-4 river temperature exceeds both of the above criteria (reference: "Predictive Model and User Guide for Spring and Fall Optimization of Power Spray Modules").

12. pH Monitoring and Dissolved Oxygen
 - a. The permittee shall continuously monitor the pH of both an ambient river control station and the circulating water discharge. The circulating water discharge shall be monitored at the point of cooling canal discharge into the Merrimack River (at the footbridge in the vicinity of Station Zero-west). The ambient river control station will be at a Merrimack Station inlet structure (Station N-5).
 - b. The permittee shall continuously monitor the dissolved oxygen content of both an ambient river control station and the circulating water discharge. Dissolved oxygen monitoring will be suspended in the fall when ambient river water temperatures have dropped below 40⁰F (4.4⁰C), and reinstated when ambient river water temperatures have risen to above 50⁰F in the Spring (reference the temperature monitoring requirements of Section 11.a, above). The circulating water discharge shall be monitored at the point of cooling canal discharge into the Merrimack River (at the footbridge in the vicinity of Station Zero-west). The ambient river control station will be at the Merrimack Station inlet structure (Station N-5).
13. All biological and hydrological monitoring program data shall be submitted to the NHDES, NHF&GD, USF&WS, and the Regional Administrator by December 31 of the following year.
14. The permittee has provided the State and EPA with the following agreement, entitled "A Comprehensive Plan for Provision of Anadromous Fish Passage Measures and Facilities at PSNH's Merrimack - Pemigewasset River Hydroelectric Dams, FERC Projects No. 1893, 2456, and 2457." The permittee shall also provide all technical advisory committee (TAC) members (see Part I.A.15., below) with copies of the annual March 1st update to this plan and any technical reports associated with it.
15. A technical advisory committee (TAC) shall be organized. Committee members shall be senior biologists appointed by the Administrators (or appropriate Division/Branch Directors) of the following federal and state regulatory agencies: NHDES, NHF&GD, USEPA, and USF&WS.

16. The permittee shall propose to the TAC a program and a schedule, for review and confirmation, which resolves the issues identified in Sub-part 17, below.
- a. The TAC may accept, reject, or modify the proposed program and schedule. After acceptance of the program and schedule by the TAC, the program will be submitted to the Regional Administrator and the Director for approval. Upon approval, the proposed program and schedule become enforceable elements of this permit.
 - b. Annually after the effective date of this permit, the permittee may propose changes to the approved biological and hydrological programs to the Regional Administrator and the Director - (a proposed modified program for the calendar year of 1993 must be submitted prior to January 1, 1993, for review and acceptance by the TAC). After the TAC acceptance, and upon the approval of the Regional Administrator and the Director, the proposed modified program(s) will become an enforceable element of this permit.
 - c. All biological and hydrological programs will be under the guidance of the TAC; i.e., review of the proposed programs, analytical protocols, and analysis of data. Based upon its conclusions, the TAC will make recommendations for modification(s) of the permit to EPA and the State to ensure protection of the aquatic community. ~~Biological and hydrological study reports shall be submitted on a semi-annual basis with an annual report summarizing the previous year's information and conclusions.~~
17. Within 90 days after the effective date of the permit, the permittee shall schedule and conduct a planning meeting with the technical advisory committee. The primary objective of this meeting is the design, development and implementation of an experimental program to resolve the following issues:
- a. Determine the seasons at which the anadromous fish will migrate and the temperatures that would affect/impede this migration and life cycle temperature requirements related to each species.
 - b. Determination of the thermal plume-configuration in the river and its effect(s): 1) on anadromous fish during the migration seasons and 2) upon indigenous fish under low water conditions.

- c. Determination of a seasonal T_{\max} at the point of discharge from the canal into the river, that would protect the anadromous and indigenous fish.
 - d. Determine, if found to be necessary, a summer Delta-T (downstream temperature minus upstream temperature) that would protect the anadromous and indigenous fish from artificially-heated river water that would be injurious to the aquatic community.
 - e. Determination of a maximum "Delta-T" (discharge temperature minus intake temperature) at the head of the canal due to a major plant/condenser shutdown. (Note: This is the maximum temperature excursion expected in the canal during an abrupt shutdown of the power plant during the winter.)
 - f. Assess the resident fish population in the cooling-water canal, and determine if this population is a significant portion of the local fishery and must be protected. If the resident fish require protection, recommendations are to be made as to the type of physical or operational improvements are required.
 - g. Assess the existing historical chemical, thermal, and biological data and determine the scope of new data that must be obtained to augment the existing data base for these studies.
 - h. Provide copies of a written agenda and work scope to accomplish the above objectives to each TAC member approximately 2 weeks prior to the above planning meeting. The TAC may approve, modify, or disapprove the proposed work scope in a formal meeting.
18. The permittee shall submit the following reports to the TAC for their approval unless the date(s) is extended by the Regional Administrator and the Director after recommendation by the TAC:
- a. A preliminary report summarizing the information required in Part I.A.17.g. and a projection of the biological and hydrological work to be accomplished during the Summer of 1993, on March 1, 1993.
 - b. A draft final report on March 1, 1994.

19. Based on the results of the final report, this permit may be reopened (40 CFR 122.62) to define a T_{max} or "Delta-T" or any other parameter required to control the discharge from the cooling water canal into the river.
20. Assuming that the cooling water canal discharge temperature must be reduced by some amount, conduct a cost/benefit study for the appropriate techniques to lower the cooling water canal discharge-temperature by 2, 4, 6, etc. degrees F. This systems-study will be submitted within six (6) months of the submittal date of the final report to the TAC.

B. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate 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 Director and the State at the following addresses:

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

The state agency is:

Department of Environmental Services
Water Supply & Pollution Control Division
Permits and Compliance Section
Hazen Drive, P.O. Box 95
Concord, New Hampshire 03301

C. STATE 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 6.5-8.0 S.U. or as naturally occurs in the receiving water. The 6.5-8.0 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. Within 30 days of the effective date of the permit, the permittee shall provide representative sampling locations for both Outfalls 001 and 002, upstream of any mixing with the cooling canal.
 - c. The permittee has determined that there is at least a three hour delay between discharges of treated wastewater from the wastewater treatment basins and the detection of the plume in the ash settling pond outfall. Therefore sampling conducted during chemical cleanings (Outfall 003B) must begin at least three hours after the discharge from the wastewater treatment basins begin.
 - d. Weekend chemical cleaning discharges are prohibited unless provisions are made to allow for the collection by the NHDES of 24 hour composite samples during normal weekday working hours.
 - e. Coal pile runoff discharges to the ash settling basin are prohibited unless treated first in the wastewater treatment facility.
 - f. The permittee is authorized to discharge treated wastewater from the intake dredge de-watering lagoon via two 24 inch pipes. In addition to the conditions described in NH Wetlands Board Permit No. 88-1328 issued on April 30, 1991, or any subsequent revisions, the permittee shall insure that the discharges do not increase the naturally occurring turbidity of the Merrimack River by more than 10 nephelometric turbidity units.
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 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 affect 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.

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(April 6, 1990)

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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 a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA is subject to a civil penalty not to exceed \$25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Act 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.
- c. Except as provided in permits conditions on "Bypassing" (Part II.B.4) and "Upsets" (Part II.B.5) below, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

2. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause, including but not limited to: (1) Violation of any terms or conditions of this permit; (2) Obtaining this permit by misrepresentation or failure to disclose all relevant facts; or (3) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge. 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 Director, within a reasonable time, any information which the Director 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 Director, 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.

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.

6. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

7. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

8. 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:
 - (i) The name and address of any permit applicant or permittee;

- (ii) Permit applications and permits; and
- (iii) NPDES effluent data.

c. Information required by NPDES application forms provided by the Director under 40 CFR §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.

9. 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 Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

10. Right of Appeal

Within thirty (30) days of receipt of notice of a final permit decision, the permittee may submit a request to the Regional Administrator for an evidentiary hearing under Subpart E, or a formal 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.

11. State Laws

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 established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the CWA.

12. 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. 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 in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Bypass

a. Definitions.

- (i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (ii) "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. Prohibition of bypass.

- (i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless all the following conditions occur:
 - (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 backup 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) The permittee submitted notices as required under Paragraph B.4.c of this section.
- (ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Paragraph B.4.b.(i) of this section.
- (iii) 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 Paragraph B.4.c of this section.

c. Notice.

- (i) 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.
- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Paragraphs D.1.a and D.1.e (24-hour notice).

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:
- (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) The permitted facility was at the time being properly operated;
 - (iii) The permittee submitted notice of the upset as required in Section D. paragraphs 1.a and 1.e (24-hour notice); and
 - (iv) 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.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner consistent with applicable Federal and State laws and regulations including, but not limited to the CWA and the Federal Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq., and regulations promulgated thereunder.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

"In accordance with the Schedule of Compliance contained in Part I of this permit, provide an alternative power source sufficient to operate the wastewater control facilities";

or, if such alternative power source is not in existence, and no date for its implementation appears in Part I of this permit:

"Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities".

SECTION C. MONITORING AND RECORDS

1. Monitoring and Records

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the discharge over the sampling and reporting period.
- b. The permittee shall retain for a period of at least 5 years (or longer as required by 40 CFR Part 503) all records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities.

The permittee shall retain wastewater related records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings from 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. This period may be extended by request of the Director at any time.

- c. Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- d. Monitoring 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 are specified in this permit.
- e. The CWA 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 \$25,000 per violation or by imprisonment for not more than 6 months per violation or by both.

- f. Monitoring results must be reported on a Discharge Monitoring Report (DMR).
- g. If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under CFR Part 136 and 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.

2. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the 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 CWA, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Reporting Requirements

- a. Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - (i) 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
 - (ii) the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to the effluent limitations in the permit, not to the notification requirements under 40 CFR §122.42(a)(1).

- (iii) 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 Director 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 written notice to the Director. The Director 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 CWA.
- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided as specified by the Director for reporting results of monitoring of sludge use or disposal practices.
- (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, 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 forms specified by the Director.
- e. Twenty-four hour reporting. 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 or the next working day.

A written submission shall also be provided within five (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.

The following information must be reported within 24 hours (24-hour reporting) or the next working day:

- (i) Any unanticipated "bypass" which causes a violation of any effluent limitation in the permit; or
- (ii) Any "upset" which causes a violation of any effluent limitation in the permit; or
- (iii) Any violation of a maximum daily discharge limitation for any of the pollutants specifically listed by the Director in the permit.

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours or the next working day.

- f. Other noncompliance. The permittee shall report all instances of noncompliance not reported under Subparagraphs (a), (b), and (e), of this section, or not reported in a compliance schedule report in the permit conditions, at the time monitoring reports are submitted. The reports shall contain the information required in Subparagraph (a) and (e) of this section.
- g. 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 Director, it shall promptly submit such facts or information.

2. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application at least 180 days prior to commencement of such discharges, or if such changes will not violate the effluent limitations specified in this permit, by notice, in writing, to the Director of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.

3. Signatory Requirement

All applications, reports, or information submitted to the Director shall be signed and certified in accordance with 40 CFR §122.22. 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 noncompliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

4. 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

- a. 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" or a related activity is subject to, including water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices," and pretreatment standards 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 standard based on an evaluation of the available technology to achieve a particular pollutant reduction.

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.

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.

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 means the person authorized to sign NPDES permits by EPA and/or the State.

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.

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."

Effluent limitation means any restriction imposed by the Director 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.

authorities as they apply to the POTW's selected method of sludge management.

Maximum daily discharge limitation means the highest allowable "daily discharge."

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 or 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).

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."

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.

Industrial User means a non-domestic discharger introducing pollutants to a publicly owned treatment works.

Interference means an addition or disruption of the POTW, its treatment processes or operations, or its sludge processes, use or disposal which is cause of or significantly contributes to either a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or to the prevention of sewage sludge use or disposal by the POTW in accordance 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, the Solid Waste Disposal Act (SWDA) (including Title II more commonly referred to as the Resource 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, and the Toxic Substance Control Act. An Industrial User significantly contributes to such a permit violation or prevention of sludge use or disposal in accordance with above-cited authorities whenever such User:

- (a) Discharges a daily pollutant loading in excess of that allowed by contract with the POTW or by Federal, State, or local law;
- (b) Discharges wastewater which substantially differs in nature or constituents from the User's average discharge; or
- (c) Knows or has reason to know that its discharge, alone or in conjunction with discharges from other sources, would result in a POTW permit violation or prevent sewage sludge use or disposal in accordance with the above-cited

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
- (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 "the discharge of pollutants through the POTW" into navigable waters in quantities or concentrations which are a cause of or significantly contribute to a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation). An industrial user significantly contributes to such permit violation where it:

- (a) Discharges a daily pollutant loading in excess of that allowed by contract with the POTW or by Federal, State, or local law:
- (b) Discharges wastewater which substantially differs in nature and constituents from the user's average discharge:
- (c) Knows or has reason to know that its discharge alone or in conjunction with discharges from other sources would result in a permit violation; or
- (d) Knows or has reason to know that the POTW is, for any reason, violating its final effluent limitations in its permit and that such Industrial User's Discharge either alone or in conjunction with Discharges from other sources, increases the magnitude or duration of the POTW's violations.

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, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

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.

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.

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.

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

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.

Sludge Management Facility, Class I, see the definition under "Class I Sludge Management Facility" above.

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).

Sludge Technical Standards (40 CFR Part 503). All references to 40 CFR Part 503 (the technical regulations required by Section 405(d) of the CWA in Parts 122, 123, and 124) refer to the final regulation. Promulgation of the final regulation is expected in 1991. Until the promulgation of this regulation, sludge requirements in the NPDES Permits are based on EPA's "Sewage Sludge Interim Permitting Strategy" dated September 1989 and EPA's "Guidance for Writing Case-by-Case Permit Requirements for Municipal Sewage Sludge" dated December 1989.

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 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.

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.

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. The following abbreviations, when used, are defined below.

cu. M/day or M ³ /day	cubic meters per day
mg/l	milligrams per liter
ug/l	micrograms per liter
lbs/day	pounds per day
kg/day	kilograms per day
Temp. °C	temperature in degrees Centigrade
Temp. °F	temperature in degrees Fahrenheit
Turb.	turbidity measured by the Nephelometric Method (NTU)
NFR or TSS	total nonfilterable residue or total suspended solids
DO	dissolved oxygen
BOD	five-day biochemical oxygen demand unless otherwise specified

CBOD	carbonaceous BOD
TKN	total Kjeldahl nitrogen as nitrogen
Total N	total nitrogen
NH ₃ -N	ammonia nitrogen as nitrogen
Total P	total phosphorus
COD	chemical oxygen demand
TOC	total organic carbon
Surfactant	surface-active agent
pH	a measure of the hydrogen ion concentration
PCB	polychlorinated biphenyl
CFS	cubic feet per second
MGD	million gallons per day
Oil & Grease	Freon extractable material
Total Coliform	total coliform bacteria
Fecal Coliform	total fecal coliform bacteria
ml/l	milliliter(s) per liter
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
Cl ₂	total residual chlorine
ZID	zone of initial dilution
Cont. (Continuous)	Continuous recording of the the parameter being monitored, i.e.: flow, temperature, pH, etc.

WATKINS
FALLS
DAM

SOUGOOK RIVER

ATTACHMENT 1
Permit No. NH0001465

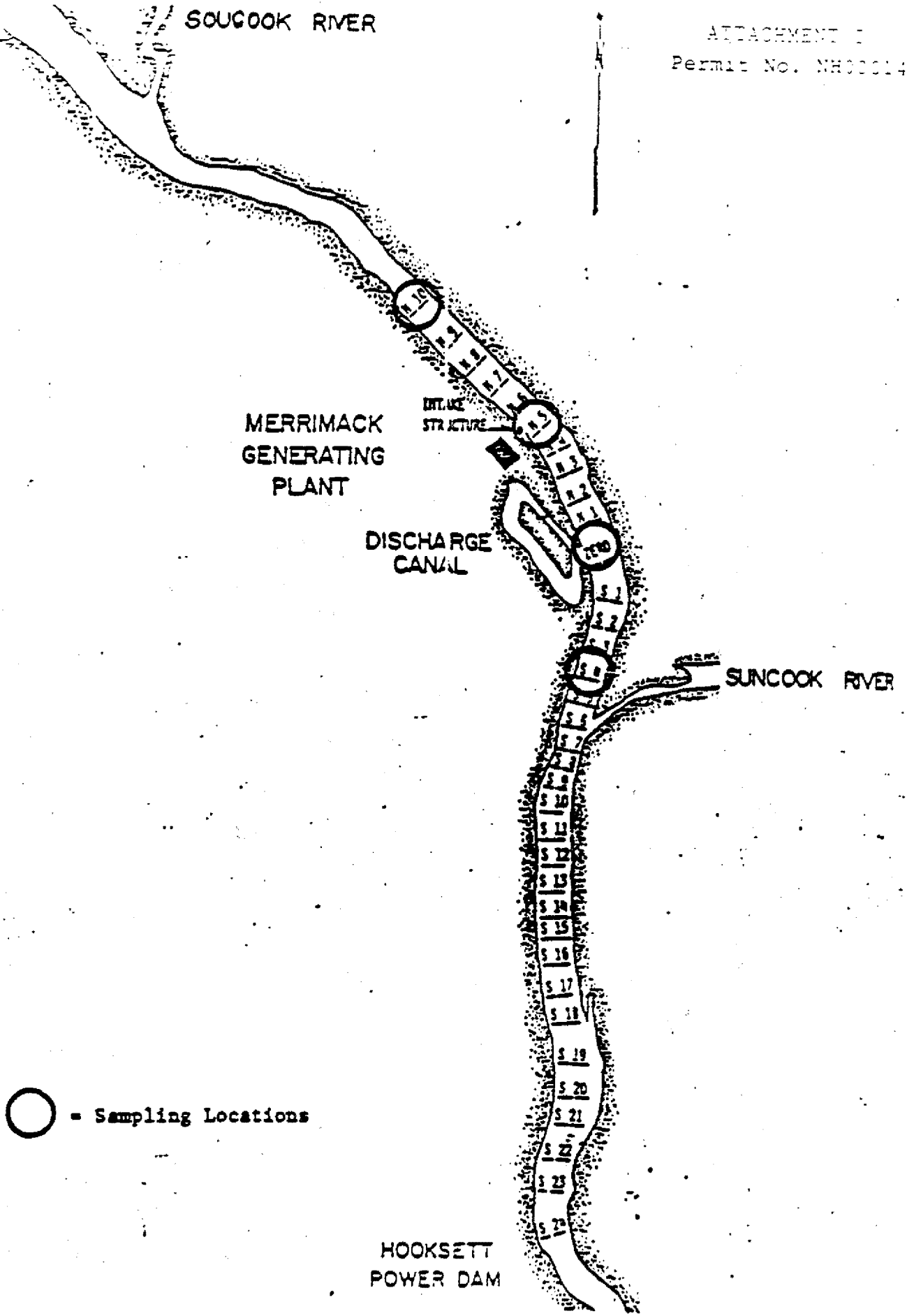


Figure 1. Location of sampling stations. Hooksett Pond, Merrimack River, NH.

(2)