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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"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Southern Energy Canal, LLC

is authorized to discharge from the facility located at

Freezer Road  
Sandwich, Massachusetts 02563

to receiving waters named Cape Cod Canal

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

This permit shall become effective on date of signature

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

This permit supersedes the permit issued on September 27, 1983.

This permit consists of 12 pages in Part I including effluent limitations, monitoring requirements, etc., and 19 pages in Part II including General Conditions and Definitions.

Signed this 23<sup>rd</sup> day of June, 1989

David G. Fenech  
Director  
Water Management Division  
Environmental Protection Agency  
Region I  
Boston, MA

This Permit is transferred to Southern Energy Canal, LLC

Signed this 29 day of March, 1999

Linda M. Murphy  
Linda M. Murphy, Director  
Office of Ecosystem Protection

Corwin J. O'Leary  
Acting Director, Division of Water  
Pollution Control  
Department of Environmental  
Quality Engineering  
Commonwealth of Massachusetts  
Boston, MA

Glenn Haas  
Glenn Haas, Director  
MA Department of Environmental Protection

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Signed this *23<sup>rd</sup>* day of *June, 1989*

David A. Fieno  
Director  
Water Management Division  
Environmental Protection Agency  
Region I  
Boston, MA

Anthony J. O'Shea  
Acting Director, Division of Water  
Pollution Control  
Department of Environmental  
Quality Engineering  
Commonwealth of Massachusetts  
Boston, MA



A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Except as specified in this paragraph and in paragraphs 2 thru 6 below, the permittee is not authorized to discharge to the Cape Cod Canal a final effluent to which it has added any pollutants.
  - a. Chlorine may be used as a biocide. No other biocide shall be used without explicit approval from EPA and the Director. Total residual chlorine (TRC) may not be discharged from any single generating unit for more than two hours per day. The quantity of TRC discharged in once through cooling water from the diffuser point shall not exceed a maximum concentration of 0.10 mg/l. Simultaneous chlorination of multi-units is permitted.
  - b. The discharges shall not jeopardize any Class SB use of the Cape Cod Canal and shall not violate applicable water quality standards.
  - c. This permit shall be modified, or revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and 307(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.
  - d. The term "EPA" means the Regional Administrator (or designee) of Region I of the U.S. Environmental Protection Agency and the term "Director" means the Director of the Massachusetts Division of Water Pollution Control.
  - e. There shall be no discharge of polychlorinated biphenyl compounds.
  - f. The thermal plumes from the station:
    - (1) shall not deleteriously interfere with the natural movements, reproductive cycles, or migratory pathways of the indigenous populations within the water body segment;
    - (2) shall have minimal contact with the surrounding shorelines.

- g. It has been determined that the circulating water intake structure employs the best technology available for minimizing adverse environmental impact. No change in the location, design or capacity of the present intake structure can be made without prior approval of EPA and the State. The present design shall be reviewed for conformity to regulations pursuant to Section 316(b) when such are promulgated.
- h. All live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens shall be returned to water of ambient temperature sufficiently distant from the intake structures to prevent reimpingement. All solid waste collected on the intake racks and screens shall not be reintroduced into the river except leaves, twigs, and grass.
- 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).
- (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).
- (3) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- J. The permittee shall submit a report within six months of the effective date of this permit to the EPA and the state describing the storm water run-off from the plant site. This report should include but not be limited to the following elements:
- (a) A site map showing the drainage areas of all stormwater water discharges to the waters of the United States.
  - (b) An estimate of the volume of stormwater discharged from each outfall using a standard storm of 1 hour duration with a 5 years recurrence.
  - (c) A narrative description of the type of discharge at each outfall; for example: roof areas, parking lots, ash piles, open chemical storage areas, and oil tank foam areas.
  - (d) A sample taken 30 to 60 minutes after the start of a storm of each outfall shall be analyzed for BOD, COD, pH and Oil/grease.
  - (e) The permit will be modified in accordance with the data provided by the permittee.

2. During the period beginning effective date and lasting through the expiration date the permittee is authorized to discharge from outfall Serial Number 001 - Condenser Cooling Water.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Other Units(Specify)</u>		<u>Measurement</u>	<u>Sample</u>
	<u>Avg. Monthly</u>	<u>Max. Daily</u>	<u>Frequency</u>	<u>Type</u>
Flow - MGD		518.0	Continuous*	Daily Average and Range
Total Residual Chlorine, mg/l		0.1	Once daily when in use except Sat. & Sun.	Grab

b. The temperature of the discharge shall at no time exceed 86°F in the upper 15 feet of the water column above the discharge diffuser. The discharge temperature shall be continuously recorded at the last accessible point prior to discharge into the Cape Cod Canal.

c. The pH shall not be less than 6.5 standard units nor greater than 8.5 standard units.

d. There shall be no discharge of floating solids or visible foam attributable to materials added by station operation in other than trace amounts.

e. Samples taken in compliance with the monitoring requirements specified above shall be taken at the last accessible point prior to discharge into the Cape Cod Canal.

\* Flow rate shall be estimated from pump capacity curves and operational hours.

3. During the period beginning effective date and lasting through the expiration date the permittee is authorized to discharge from outfall Serial Number 002 - Intake Screen Sluice and Flume Flushing Water.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Other Units(Specify)</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Avg. Monthly</u>	<u>Max. Daily</u>		
Flow - MGD	2.5	4.4	Estimate	Daily

b. Water temperature at the mouth of the former discharge flume of Unit No. 1 shall be maintained at 90°F or below.

c. The pH shall not be less than 6.5 standard units nor greater than 8.5 standards units.

d. There shall be no discharge of floating solids or visible foam attributable to materials added by station operation in other than trace amounts.

e. Samples taken in compliance with the monitoring requirements specified above shall be taken at the last accessible point which is representative prior to discharge into the Cape Cod Canal.

4. During the period beginning effective date and lasting through the expiration date the permittee is authorized to discharge from outfall Serial Number 010 - Floor and Equipment Drains, No. 1.
- a. Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Other Units(Specify)		Measurement	Sample
	Avg. Monthly	Max. Daily	Frequency	Type
Flow - MGD	0.072	0.144	Continuous* when in use	Daily Average and Range
Oil and Grease, mg/l	10.0	15.0	Weekly	Grab

- b. The pH shall not be less than 6.5 standard units nor greater than 8.5 standard units and shall be monitored weekly by a grab sample.
- c. There shall be no discharge of floating solids or visible foam in other than trace amounts due to material added by the station.
- d. Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge side of the oil separator prior to discharge into the Discharge Flume.
- \* Flow shall be measured by continuous pump operational hours and pump capacity curves.



5. During the period beginning effective date and lasting through expiration date the permittee is authorized to discharge from outfall Serial Number 011\* - Equipment Washes, Chemical Cleaning and Ash Sluice Blowdown.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Other Units (Specify)</u>		<u>Measurement</u>	<u>Sample</u>
	<u>Avg. Monthly</u>	<u>Max. Daily</u>	<u>Frequency</u>	<u>Type</u>
Flow - MGD	0.25	0.40	Continuous	Daily Average and Range
Total Copper, mg/l	1.0	1.0	Weekly	Grab
Total Iron, mg/l	1.0	1.0	Weekly	Grab
Total Suspended Solids, mg/l	30.0	100.0	Weekly	Grab
Oil and Grease, mg/l	10.0	15.0	Weekly	Grab

- b. The permittee shall notify the EPA and the Director in writing at least 7 days prior to any extraordinary waste processing operations and furnish an estimate of the length of time such operations shall take.
- c. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored at a point prior to discharge into the Cape Cod Canal.
- d. There shall be no discharge of floating solids or visible foam in other than trace amounts due to material added by station operation.
- e. Samples taken in compliance with the monitoring requirements specified above shall be taken at any representative point prior to mixing with any other discharge.
- \* Discharge 011 is defined as the discharge from the Waste System Blowdown from Waste Ponds A,B,C, or D regardless of the actual point of release into the cooling water discharge.

6. During the period beginning effective date and lasting through the expiration date the permittee is authorized to discharge from outfall Serial Number 012 - Demineralizer and Condensate Polisher Wastes from Unit No. 1 and 2, and Floor Drains from Unit No. 2.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Avg. Monthly	Other Units (Specify) Max. Daily	Measurement Frequency	Sample Type
Flow - MGD	0.07	0.12*	Continuous	Daily Average and Range
Total Suspended Solids, mg/l	30.0	100.0	Once every two weeks	24 hour composite
Oil and Grease, mg/l		15.0	Once every two weeks	Grab

b. The pH shall not be less than 6.5 standard units nor greater than 8.5 standard units and shall be monitored once every two weeks by grab sample.

c. There shall be no discharge of floating solids or visible foam in other than trace amounts due to materials added by station operation.

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

\* The flow rate of the regeneration wastes shall not exceed 600 gpm.

## 7. Biological Monitoring

No biological monitoring is required. Future monitoring may be required, however, upon permit reissuance. Any incidence of fish mortality associated with the thermal plume or of unusual numbers of fish impinged on the intake traveling screens shall be reported to the Regional Administrator and the Director within 24 hours by telephone report as required in Part II(1)(5) of this permit. A written confirmation report is to be provided within five(5) days. These reports should include the following:

- a. The kinds, sizes, and approximate number of fish involved in the incident.
- b. The time and date of the occurrence.
- c. The operating mode of the plant at the time of the occurrence.
- d. The opinion of the company as to the reason the incident occurred.
- e. The remedial action the company will take to prevent a reoccurrence of the incident.



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 Forms postmarked no later than the 21st day of the month following the completed reporting period. The first report is due on the 21st day of the month following the effective date of the permit.

- a. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Director and the State at the following address:

Permit Compliance Section  
Compliance Branch  
Post Office Box 8127  
Boston, MA 02114

The State Agency is:

Department of Environmental Quality Engineering  
Division of Water Pollution Control  
Southeast Regional Office  
Lakeville Hospital  
Lakeville, Massachusetts 02346

- b. Signed copies of all other notifications and reports required by this permit shall be submitted to the State at:

Massachusetts Department of Environmental Quality Engineering  
Massachusetts Division of Water Pollution Control  
Regulatory Branch  
1 Winter Street  
Boston, Massachusetts 02108

### C. STATE PERMIT CONDITIONS

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency and the Division of Water Pollution Control under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Director of the Massachusetts Division of Water Pollution Control pursuant to M.G.L. Chap. 21, §43.

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 shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.

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

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

NPDES PERMIT NO.: MA0004928

STATE PERMIT NO.: 83

NAME AND ADDRESS OF APPLICANT:

Canal Electric Company  
2421 Cranberry Highway  
Wareham, Massachusetts 02571

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Canal Electric Company  
Freezer Road  
Sandwich, Massachusetts 02563

RECEIVING WATER: Cape Cod Canal

CLASSIFICATION: SB

I. Proposed Action, Type of Facility.

The above named applicant has applied to the U.S. Environmental Protection Agency for reissuance of its NPDES permit to discharge into the designated receiving water. The facility is engaged in generation of electricity by use of fossil fuels. The discharge is from once-through cooling water and process wastewater.

II. Description of Discharge.

A quantitative description of the discharge in terms of significant effluent parameters based on recent effluent monitoring data is shown on Attachments A and B.



### III. Limitations and Conditions.

The effluent limitations of the draft permit, the monitoring requirements, and any implementation schedule (if required) may be found on the draft permit.

### IV. Permit Basis and Explanation of Effluent Limitation Derivation.

The Canal Electric Company is a 1120 MW electric generating station located adjacent to the Cape Cod Canal in Sandwich, Massachusetts. Unit No. 1 went into commercial operation during the summer of 1968 and Unit No. 2 went into commercial operation in February of 1976. Unit No. 1 and Unit No. 2 are of equal generating capacity.

#### a. Chemical Effluent Limitations.

The Clean Water Act (CWA) requires that the effluent of point source discharges satisfy minimum technology and water quality requirements. Section 301(b)(2)(A) and (E) of the CWA provides that by July 1, 1984, industry must meet limitations based on Best Available Technology Economically Achievable (BAT) for toxic pollutants and Best Conventional Pollutant Control Technology (BCT) for conventional pollutants ( BOD, TSS, Oil & Grease, and Fecal Coliform). Section 301 (b) (1) (c) of the CWA requires that effluent limitations based on water quality considerations be established for point source discharges when such limitations are necessary to meet state or federal water quality standards that are applicable to the designated receiving water. This is necessary when technology based limitations would interfere with the attainment or maintenance of water quality in the receiving water.

The effluent limitations proposed for this permit were developed using Steam Electric Guidelines (40 C.F.R. 423) as promulgated on November 19, 1982 (47 Fed. Reg. 52290), the State of Massachusetts Water Quality Requirements(WQR) and upon Best Engineering Judgement (BEJ), pursuant to Section 402(a)(1) of the C.W.A.

The chlorine effluent limitations presented in the permit are based on the Steam Electric Power Plant Guidelines. The guidelines state that total residual chlorine (total residual oxidants) may not be discharged from any single generating unit for more than two hours per day. Simultaneous multi-unit chlorination is permitted. The quantity of total residual chlorine (total residual oxidants) discharged in once through cooling water from each generating unit shall not exceed a maximum concentration of 0.20 mg/l. The total residual chlorine shall not exceed a maximum concentration of 0.1 mg/l at the diffuser. This limitation reflects the State of Massachusetts W.Q.R.

No storm water run-off has been regulated in the permit. Due to the complexity of the run-off at the site the permittee is required to submit to the EPA and the state within six months of the effective date of the permit detailed information in this regard, at such a time EPA will evaluate the information and modified the permit.

The effluent monitoring requirements have been established to yield data representative of the discharges under the authority of Section 308(a) of the Clean Water Act, according to regulations set forth at 40 C.F.R. 122.41(j), 122.48, 122.41(j)(4)(5), and 122.44(i).



b. Thermal Effluent Limitations.

The Canal Electric Company is a 1120 MW electric generating station locating adjacent to the Cape Cod Canal in Sandwich, Massachusetts. Unit No. 1 went into commercial operation during the summer of 1968 and Unit No. 2 went into commercial operation in February of 1976. The station's circulating water system provides once-through cooling water to the condensers and uses approximately 518 MGD of water from the Cape Cod Canal. Cooling water passing through the condensers experiences a temperature rise of about 35°F above ambient and is discharged back into the ambient water via a submerged slotted pipe diffusers located at the bottom of the Cape Cod Canal approximately 925 feet from the intake structures.

The discharge of water from the Canal Electric Company is to the Cape Cod Canal, a class SB water. The water quality criteria for thermal discharges to class SB water are "none, except where the increase will not exceed the recommended limits on the most sensitive water use." In establishing upper thermal limits for estuarine and marine power plant discharges in Massachusetts, the most sensitive water use has been assumed to be the upper thermal limit of menhaden, Brevortia tyrannus, a species of fish which seasonally inhabits the local waters including the Cape Cod Canal. Based upon laboratory studies and some field work a recommended upper thermal limit of 90°F has been established.

The NPDES permit for the Canal Electric Company requires that the temperature of the discharge shall at no time exceed 86°F in the upper 15 feet of the water column above the discharge diffuser. A hydrographic study was conducted in August, 1976 to determine if the discharge diffuser was meeting the permit conditions. The results of the survey indicated that the diffuser meets its design criteria. The authors of the document state that the possibility of ever recording a temperature of 86°F in the top 15 feet of the water column above the diffuser is extremely remote.

Section 316 (a) and (b) of the Clean Water Act.

Section 316 (a) of the Clean Water Act (CWA) addresses the thermal component of any effluent discharge. EPA has not developed best practicable control technology currently available (BPT) for thermal discharges from point sources. However, EPA assumes that if thermal limits satisfying BPT were developed in accordance with Section 301(b)(1)(A) of the CWA, they would be less stringent than what would be proposed by the NPDES Permit applicant. This is based upon the premise that the water quality criteria developed by EPA or by individual water quality standards, developed by states would be the limiting factor in the development of the NPDES permit. It should also be noted that thermal discharges (heat) are not subject to the technology standards required by Best Conventional Pollutant Control Technology Economically Achievable since heat is not considered to be a toxic pollutant or a conventional pollutant as defined by the CWA and outlined in 40 CFR 401.15 or 401.16.

Section 316(a) of the CWA gives the Administrator of the EPA the authority to impose alternative effluent limitations for the control of the thermal component of any discharge. However, the



owner or operator of the point source must demonstrate to the satisfaction of the Administrator that existing effluent limitations are more stringent than necessary to assure the protection and propagation of a balanced indigenous community of shellfish, fish and wildlife in and on the receiving water.

Similarly, Section 316(b) of the CWA gives the Administrator of the EPA the authority to determine if the location, design, construction, and capacity of the cooling water intake structures reflect BPT for minimizing adverse environmental impact.

The authority of these two sections of the CWA has been delegated to the Regional Administrators or their designees in accordance with regulatory procedures outlined under 40 CFR 125.

In late 1982, a document was submitted to EPA entitled, The Effects of Power Generation on some of the Living Marine resources of the Cape Cod Canal and Approaches. The document was authored by personnel from the Massachusetts Department of Fisheries, Wildlife and Recreational Vehicles, Division of Marine Fisheries (the "Division").

Division personnel served as principal investigators of the biological studies that were required by the previous NPDES permit. The major results of the studies indicated that the marine resources of the Cape Cod Canal and surrounding water bodies were adequately protected by the environmental safeguards contained within the NPDES permit. Copies of the Division's studies are available upon request.

In 1978 the company submitted to EPA a document entitled, Final Report on Fish Entrapment, Canal Units 1&2 Intake Screens. The document summarized fish entrapment data collected from June, 1975 to December, 1977. The conclusion of the study was that fish entrapment at the station was minimal. Also, the installation of chutes to transport impinged fish back into ambient Cape Cod Canal water greatly improved the survival of impinged fish. Studies during the past few years show that the numbers of fish observed on the intake screens has remained within the range expected based upon the previous studies. Finfish entrapment still appears to be minimal at the station.

#### V. State Certification Requirements.

EPA may not issue a permit unless the State Water Pollution Control Agency with jurisdiction over the receiving waters certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards. The staff of the Massachusetts Division of Water Pollution control has reviewed the draft permit and advised EPA that the limitations are adequate to protect water quality. EPA has requested permit certification by the State and expects that the draft permit will be certified.



VI. Comment Period, Hearing Requests, and Procedures for Final Decisions.

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, Compliance Branch, JFK Federal Building, Boston, Massachusetts 02203. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within 30 days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of 40 C.F.R. §124.74, 48 Fed. Reg. 14279-14280 (April 1, 1983).

VII. EPA Contact.

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

Victor Alvarez  
John F. Kennedy Federal Building  
Boston, MA 02203  
Telephone: (617) 565-3501

July 18, 1988

-----  
Date

David A. Fierra, Director  
Water Management Division  
Environmental Protection Agency

ATTACHMENT A-1

DESCRIPTION OF DISCHARGE:

Discharge 001

Condenser Cooling Water

Note: Attachment B shows the geographic location and schematic flow of the process streams within the power plant.

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE

<u>Parameter</u>	<u>Data</u>		<u>Old Permit Limits</u>	
	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
Flow, MGD		405		518.0
Total Residual Chlorine, mg/l		0.1		0.1

The temperature of the discharge shall at no time exceed 86°F in the upper 15 feet of the water column above the discharge diffuser.

ATTACHMENT A-2

DESCRIPTION OF DISCHARGE:

Discharge 002 -

Intake Screen Sluice and Flume Flushing Water

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE

<u>Parameter</u>	<u>Data</u>		<u>Old Permit Limits</u>	
	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
Flow, MGD	1.4	4.4	2.5	4.4
Temperature, Maximum °F	50	58		90.0



ATTACHMENT A-3

DESCRIPTION OF DISCHARGE:

Discharge 010

Floor and Equipment Drains, Unit No. 1.

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE

<u>Parameter</u>	<u>Data</u>		<u>Old Permit Limits</u>	
	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
Flow, MGD	0	0	0.072	0.144
Oil and Grease, mg/l	N.A	N.A	10.0	15.0

ATTACHMENT A-4

DESCRIPTION OF DISCHARGE:

Discharge 011

Equipment Washes, Chemical Cleaning and Ash Sluice Blowdown.

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE

<u>Parameter</u>	<u>Data</u>		<u>Old Permit Limits</u>	
	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
Flow, MGD	0.13	0.20	0.25	0.40
Total Copper, mg/l	0.15	.20	1.0	0.40
Total Iron, mg/l	0.9	1.0	1.0	1.0
Total Suspended Solids, mg/l	20	35	30.0	100.0
Oil and Grease, mg/l	3.0	6.0	10.0	15.0

Discharge 011 is defined as the discharge from the Waste System Blowdown from Waste Ponds A,B,C or D regardless of the actual point of release into the cooling water discharge.

ATTACHMENT A-5

DESCRIPTION OF DISCHARGE:

Discharge 012

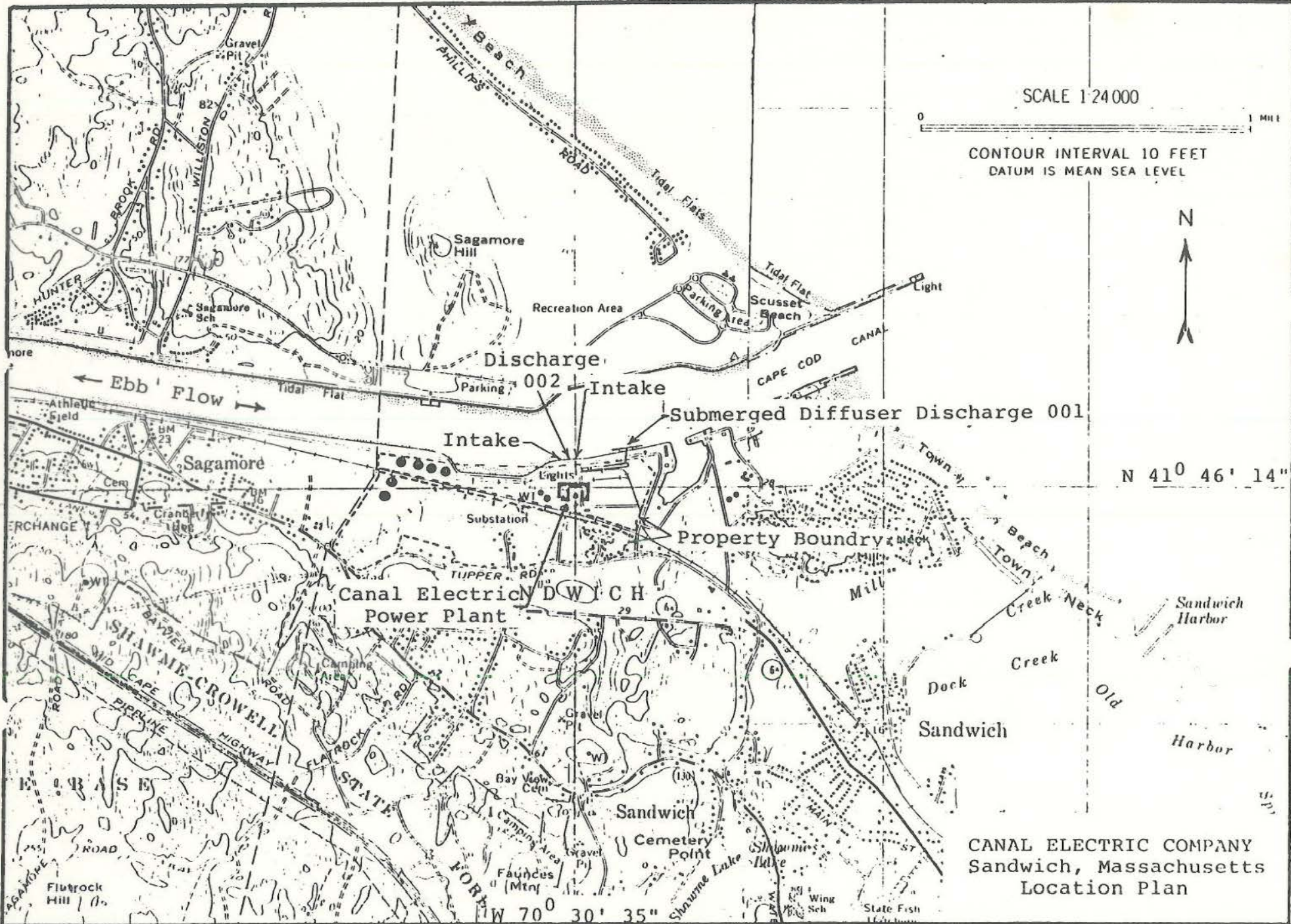
Demineralizer and Condensate Polisher Wastes from Unit No. 1 and 2,  
and Floor Drains from Unit No. 2.

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE

<u>Parameter</u>	<u>Data</u>		<u>Old Permit Limits</u>	
	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
Flow, MGD	0.04	0.09	0.07	0.12
Total Suspended Solids, mg/l	10	13	30.0	100.0

The flow rate of the regeneration wastes shall not exceed 600 gpm.

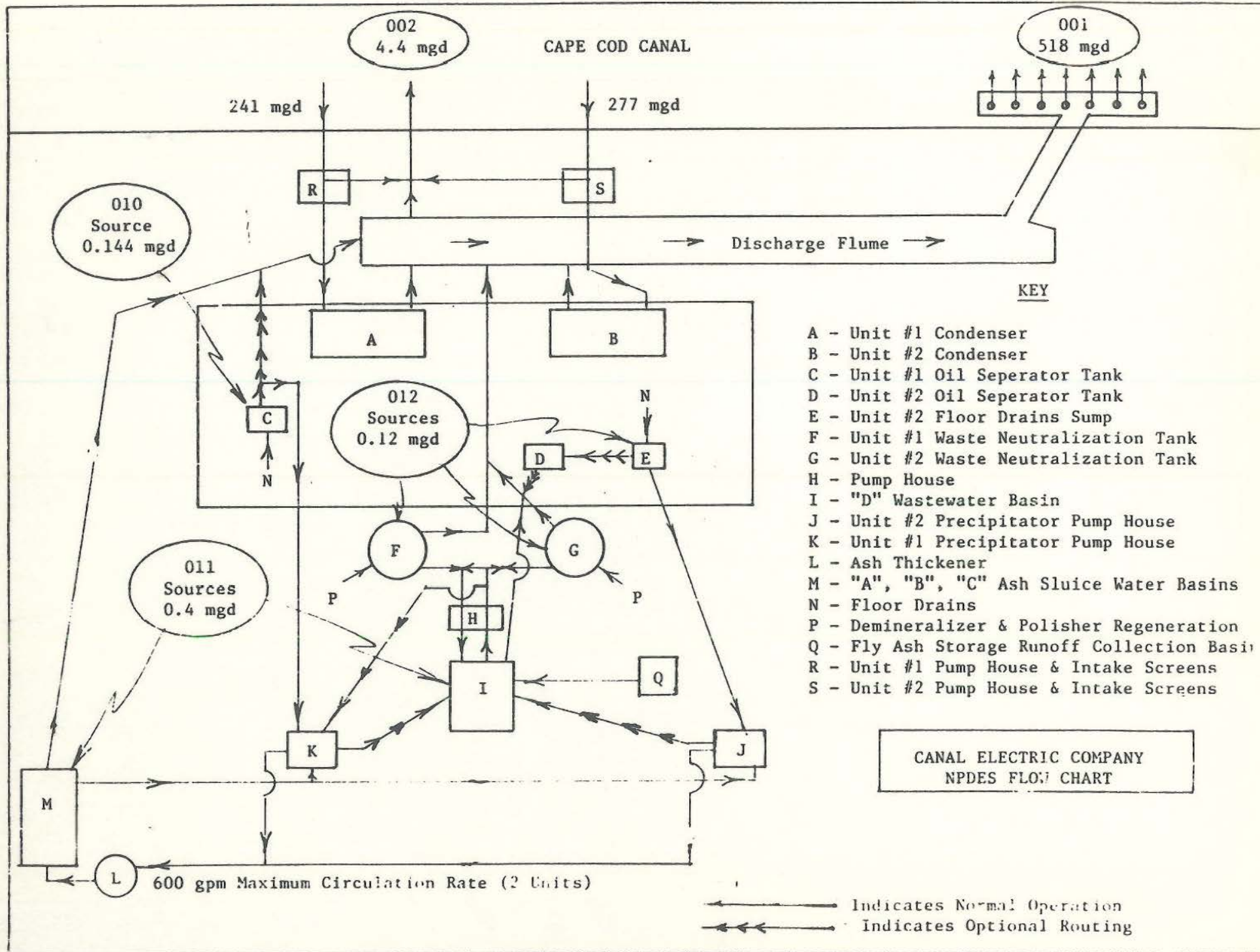




ATTACHMENT B



ATTACHMENT B



- KEY**
- A - Unit #1 Condenser
  - B - Unit #2 Condenser
  - C - Unit #1 Oil Separator Tank
  - D - Unit #2 Oil Separator Tank
  - E - Unit #2 Floor Drains Sump
  - F - Unit #1 Waste Neutralization Tank
  - G - Unit #2 Waste Neutralization Tank
  - H - Pump House
  - I - "D" Wastewater Basin
  - J - Unit #2 Precipitator Pump House
  - K - Unit #1 Precipitator Pump House
  - L - Ash Thickener
  - M - "A", "B", "C" Ash Sluice Water Basins
  - N - Floor Drains
  - P - Demineralizer & Polisher Regeneration
  - Q - Fly Ash Storage Runoff Collection Basin
  - R - Unit #1 Pump House & Intake Screens
  - S - Unit #2 Pump House & Intake Screens

CANAL ELECTRIC COMPANY  
NPDES FLOW CHART

————— Indicates Normal Operation  
- - - - - Indicates Optional Routing

PART II  
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DEFINITIONS



GENERAL REQUIREMENTS

(a) 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.

- (1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants 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.
- (2) 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 \$10,000 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.

(b) Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, 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.)

(c) 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.

(d) 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.

(e) 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 the operation is necessary to achieve compliance with the conditions of the permit.

(f) 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.

(g) Property Rights

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

(h) 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.

(i) 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:

- (1) 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;



- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (4) 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.

(j) Monitoring and Records

- (1) 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.
- (2) The permittee shall retain 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.
- (3) 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.
- (4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- (5) 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 \$10,000 per violation or by imprisonment for not more than 6 months per violation or by both.

- (6) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
- (7) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 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.

(k) 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 \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(l) Reporting Requirements

- (1) 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 pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR §122.42(a)(1).
- (2) 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.
- (3) 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.

- (4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (5) 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.

- (6) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (1), (2), and (5), 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 paragraph (1)(5) of this section.
- (7) 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.



(m) Bypass

(1) 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.

(2) 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 (m)(3) 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 (m)(2)(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 (m)(3) of this section.

(3) 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 paragraph (1)(5) of this section (24-hour notice).

(n) Upset

- (1) 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.
- (2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such such technology-based permit effluent limitations if the requirements of paragraph (n)(3) 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.
- (3) 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 paragraph (1)(5) of this section (24-hour notice); and
  - (iv) The permittee complied with any remedial measures required under (d) above.
- (4) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.



(o) 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.

(p) 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.

(q) 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, 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,

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.

(r) Availability of Reports

Except for data determined to be confidential under paragraph (x) below, 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.

(s) 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.

(t) 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.

(u) 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.

(v) 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.

(w) 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.

(x) Confidentiality of Information

(1) 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).

(2) 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.

(3) 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.

(y) 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.

DEFINITIONS

1. 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, 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.

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-hours 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.

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

(1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes use of disposal; and

(2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, 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, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

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 Sections 125.122.(a)(1) through (10).

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

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

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

NPDES means "National Pollutant Discharge Elimination System."



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

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

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

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

Point source means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, 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 surfact 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."

Sewage sludge means the solids, residues, and precipitate separated from or created in sewage by the unit processes of a "publicly owned treatment works." "Sewage" as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff, that are discharged to or otherwise enter a publicly owned treatment works.

Toxic pollutant means any pollutant listed as toxic in Appendix D of 40 CFR Part 122, under Section 307(a)(1) of CWA.



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) - (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) - (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 <sup>3</sup> /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)
TNFR 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 <sub>3</sub> -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 <sub>3</sub> -N	nitrate nitrogen as nitrogen
NO <sub>2</sub> -N	nitrite nitrogen as nitrogen
NO <sub>3</sub> -NO <sub>2</sub>	combined nitrate and nitrite nitrogen as nitrogen
Cl <sub>2</sub>	total residual chlorine



