AUTHORIZATION TO DISCHARGE UNDER THE
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

The Narragansett Bay Commission
One Service Road
Providence, Rhode Island 02905

is authorized to discharge from a facility located at the

Bucklin Point Wastewater Treatment Facility
102 Campbell Avenue
East Providence, Rhode Island 02914
And
Associated Combined Sewer Overflows

to receiving waters named

Seekonk, Moshassuck, and Blackstone Rivers

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

This permit shall become effective on February 1, 2002.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on December 31, 1990.

This permit consists of 30 pages in Part I including effluent limitations, monitoring requirements, etc. and 10 pages in Part II including General Conditions.

Signed this 31ST day of December, 2001.

Angelo S. Liberti, P.E., Chief of Surface Water Protection
Office of Water Resources
Rhode Island Department of Environmental Management
Providence, Rhode Island

PART I

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A. (Secondary Treatment Discharge)

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

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity - lbs./day		Concentration - specify units				
	Average Monthly	Maximum Daily	Average Monthly *(Minimum)	Average Weekly *(Average)	Maximum Daily *(Maximum)	Measurement Frequency	Sample Type
Flow (To Plant Headworks)	--- MGD	116 MGD[1]				Continuous	Recorder
Flow (To Secondary Treatment)	31 MGD	46 MGD				Continuous	Recorder
BOD_5	7,756	19,182	30 mg/l	45 mg/l	50 mg/l	1/Day	24-Hr. Comp.
BOD_5 - % Removal	85%					1/Month	Calculated
TSS	7,756	19,182	30 mg/l	45 mg/l	50 mg/l	1/Day	24-Hr. Comp.
TSS - % Removal	85%					1/Month	Calculated
Settleable Solids[2]				--- ml/l	--- ml/l	1/Day	Grab

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Sampling for TSS, BOD_5, Flow, and Settleable Solids shall be performed Sunday-Saturday. All BOD_5 and TSS samples shall be taken on the influent and effluent with appropriate allowances for hydraulic detention (flow-through) time.

[1]Flow to the WWTF's headworks shall be reported. All flows up to 116 MGD shall receive at least primary treatment and disinfection. Up to 46 MGD must receive secondary treatment.

[2]Settleable solids monitoring has been included as a process-control parameter to aid in the assessment of the operation of the plant but no effluent limit has been established.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 001A.

PART I

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

2. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A (Secondary Treatment Discharge).

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

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity - lbs./day		Concentration - specify units				
	Average Monthly	Maximum Daily	Average Monthly *(Minimum)	Average Weekly *(Average)	Maximum Daily *(Maximum)	Measurement Frequency	Sample Type
Fecal Coliform			200 MPN[1] 100 ml	400 MPN[1] 100 ml	400 MPN[1] 100 ml	3/Day	Grab[2]
Total Residual Chlorine (TRC)			13.0 ug/l[2]		13.0 ug/l[2]	6/Day	Grab
pH			(6.0 SU)		(9.0 SU)	1/Day	Grab

[1]The Geometric Mean shall be used to obtain the "weekly average" and the "monthly average."

[2] Compliance with these limitations shall be determined by taking a minimum of three (3) grab samples per day with a minimum of four (4) hours between the first two samples and a minimum of two (2) hours between the second and third samples.

[3] The use of a continuous TRC recorder after chlorination and prior to dechlorination is required to provide a record that proper disinfection was achieved at all times. Compliance with these limitations shall be determined by taking six (6) grab samples per day with a minimum of three (3) hours between grabs. The maximum daily and average monthly values are to be computed from the averaged grab sample results for each day. The following methods may be used to analyze the grab samples: (1) Low Level Amperometric Titration, Standard Methods (18th Edition) No. 4500-Cl E; (2) DPD Spectrophotometric, EPA No. 330.5 or Standard Methods (18th Edition) No. 4500-Cl G. The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit which is defined as 50 ug/l for TRC. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

*Values in parentheses () are to be reported as Minimum/Average/Maximum for the reporting period rather than Average Monthly/Average Weekly/Maximum Daily.

Sampling for Fecal Coliform, pH, and Chlorine Residual shall be performed Sunday-Saturday.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 001A.

PART 1

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

3. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A (Secondary Treatment Discharge).

   Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity - lbs./day			Concentration - specify units			
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Oil and Grease			--- mg/l		--- mg/l	1/Month	3 Grabs[1]
Phosphorus, Total			--- mg/l		--- mg/l	1/Week	24-Hr. comp.
TKN			--- mg/l		--- mg/l	1/Week	24-Hr. Comp.
Nitrite, Total (as N)			--- mg/l		--- mg/l	1/Week	24-Hr. Comp.
Nitrate, Total (as N)			--- mg/l		-- mg/l	1/Week	24-Hr. Comp.
Nitrogen, Total (TKN + Nitrate + Nitrate, as N)			--- mg/l		--- mg/l	1/Week	Calculated
Ammonia, Total (as N)							
May - October			5.4 mg/l		17.8 mg/l	2/Week	24-Hr. Comp.
November - April			15.8 mg/l		52.0 mg/l	2/Week	24-Hr. Comp.

[1] Three (3) grab samples shall be equally spaced over the course of a twenty-four (24) hour period with one sample collected per shift and a minimum of six (6) hours between samples. Each grab sample must be analyzed individually and the maximum values reported.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday at the following locations: Outfall 001A.

PART 1

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

4. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A. (Secondary Treatment Discharge).

   Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity - lbs./day		Concentration - specify units				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Hexavalent Chromium, Total[1]			60 [g/l		997 [g/l	2/Week	24-Hr. Comp.
Copper, Total[1]			5.2 [g/l		5.2 [g/l	2/Week	24-Hr. Comp.
Lead, Total[1]			10.3 [g/l		199 [g/l	2/Week	24-Hr. Comp.
Mercury Total[1]			0.04 [g/l[3]		1.7 [g/l	2/Week	24-Hr. Comp.
Nickel, Total[1]			13.7 [g/l		67 [g/l	2/Week	24-Hr. Comp.
Silver, Total[1]			--- [g/l		2.0 [g/l	2/Week	24-Hr. Comp.
Zinc, Total[1]			76 [g/l		76 [g/l	2/Week	24-Hr. Comp.
Cyanide[1]			0.8 [g/l[3]		0.8 [g/l[3]	2/Week	24-Hr. Comp.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

[1] Samples shall be taken on the influent and effluent with appropriate allowances for hydraulic detention (flow-through) time.

[2] Compliance with these limitations shall be determined by taking three grab samples per eight-hour shift with a minimum of two (2) hours between grabs, and preserved immediately upon collection. All samples shall be composited, then analyzed for available Cyanide.

[3] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 0.2 [g/l for Mercury and 20.0 [g/l for Cyanide. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday at the following locations: Outfall 001A.

PART 1

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

5. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A (Secondary Treatment Discharge).

   Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity - lbs./day		Concentration - specify units				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Mysidopsis Bahia LC50[1]					100% or Greater[2]	1/Quarter	24-Hr. Comp.
Arbacia punctulata C-NOEC[3]					50%	1/Quarter	24-Hr. Comp.

[1]LC_{50} is defined as the concentration of wastewater that causes mortality to 50% of the test organisms.

[2]The 100% or greater limit is defined as a sample that is composed of 100% effluent.

[3]C-NOEC is defined as the highest concentration of toxicant or effluent at which no adverse effects are observed.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: Outfall 001A in accordance with I.B. of the permit.

PART 1

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

6. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 002A (North Diversion Structure).

   Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity - lbs./day		Concentration - specify units				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow	--- MGD	--- MGD				Continuous	Recorder

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 002A.

7. a. The pH of the effluent shall not be less than 6.0 nor greater than 9.0 standard units at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.

b. The discharge shall not cause visible discoloration of the receiving waters.

c. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

d. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and 5-day biochemical oxygen demand. The percent removal shall be based on monthly average values.

e. When the effluent discharged for a period of 90 consecutive dry weather days exceeds 80 percent of the designed flow, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

f. The permittee shall analyze its effluent semi-annually for the EPA Priority Pollutants as listed in 40 CFR 122, Appendix D, Table II and III. The results of these analyses shall be submitted to the Department of Environmental Management by January 15th of the following year. The State user fee samples may be utilized provided that the sampling is coordinated in advance. All sampling and analysis shall be done in accordance with EPA Regulations, including 40 CFR, Part 136; grab and composite samples shall be taken as appropriate.

g. This permit serves as the State's Water Quality Certificate for the discharges described herein.

B. BIOMONITORING REQUIREMENTS AND INTERPRETATION OF RESULTS

1. General

Beginning on the effective date of the permit, the permittee shall perform four (4) acute and four (4) chronic toxicity tests per year on samples collected from discharge outfall 001. The permittee shall conduct the tests during dry weather periods (no rain within forty-eight (48) hours prior to or during sampling unless approved by RIDEM) according to the following test frequency and protocols. Data shall be reported as outlined in Section 10. Test results will be interpreted by the State. The State may require additional screening, range finding, definitive acute or chronic bioassays as deemed necessary based on the results of the initial bioassays required herein. Indications of toxicity could result in requiring a Toxicity Reduction Evaluation (TRE) to investigate the causes and to identify corrective actions necessary to eliminate or reduce toxicity to an acceptable level.

2. Test Frequency

On four sampling events, (one each calendar quarter) the permittee will conduct toxicity tests on the two species listed below, for a total of eight toxicity tests per year. This requirement entails performing two-species testing as follows:

Species	Test Type Two Species Test (Four Times Annually)	Frequency
Mysids (Mysidopsis bahia)	Definitive 48-Hour Acute Static (LC_{50})	Quarterly

Arbacia punctulata	Sea Urchin 1 hour fertilization test (chronic)	Quarterly

3. Testing Methods

Acute definitive toxicity tests shall be conducted in accordance with protocols listed in the EPA document: Cornelius I. Weber, et. al., 1991. Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition (or the most recent edition), Office of Research and Development Cincinnati, OH (EPA-600/4-90-027), incorporating any deviations from protocol listed herein, or additional methods if approved by the Director of RIDEM.

4. Sample Collection

For each sampling event a twenty-four (24) hour flow proportioned composite final effluent sample shall be collected during a dry weather (no rain forty-eight (48) hours prior to or during sampling unless approved by RIDEM). This sample shall be kept cool (at 4^{o}C) and testing shall begin within twenty-four (24) hours after the last sample of the composite is collected. In the laboratory, the sample will be split into two (2) subsamples, after thorough mixing, for the following:

A: Chemical Analysis
B: Acute Toxicity Testing

All samples held overnight shall be refrigerated at 4^{o}C. Grab samples must be used for pH and temperature.

5. Salinity Adjustment

Prior to the initiation of testing, the effluent must be adjusted to make the salinity of the effluent equal to that of the marine dilution water. The test solution must be prepared by adding non-toxic dried ocean salts to a sufficient quantity of 100% effluent to raise the salinity to the desired level. After the addition of the dried salts, stir gently for thirty (30) to sixty (60) minutes, preferably with a magnetic stirrer, to ensure that the salts are in solution. It is important to check the final salinity with a refractometer or salinometer. Salinity adjustments following this procedure and in accordance with EPA protocol will ensure that the concentrations (% effluent) of each dilution are real and allow for an accurate evaluation with the acute permit limit and chronic monitoring requirements.

6. Dilution Water

Dilution water used for marine acute toxicity analyses should be of sufficient quality to meet minimum acceptability of test results (See 7 and 8). For both species, natural seawater shall be used as the dilution water. This water shall be collected from Narragansett Bay off the dock at the URI's Graduate School of Oceanography on South Ferry Road, Narragansett. It is noted that the University claims no responsibility for the personal safety on this dock. The permittee shall observe the rules posted at the dock. If this natural seawater diluent is found to be, or suspected to be toxic or unreliable, an alternate source of natural seawater or, deionized water mixed with hypersaline brine or artificial sea salts of known quality with a salinity and pH similar to that of the receiving water may be substituted AFTER RECEIVING WRITTEN APPROVAL FROM RIDEM.

7. Effluent Toxicity Test Conditions for Mysids[1] (Mysidopsis bahia)

1.	Test Type	48-Hour Static Acute Definitive
2.	Salinity	25 ppt ± 10% for all dilutions
3.	Temperature (C)	25° ± 1°C
4.	Light Quality	Ambient laboratory illumination
5.	Photoperiod	8 - 16 Hour Light/24-Hour
6.	Test Chamber Size	250 ml
7.	Test Solution Volume	200 ml
8.	Age of Test Organisms	1 - 5 Days
9.	No. Mysids per Test Chamber	10
10.	No. of Replicate Test Chamber Per Concentration	2
11.	Total No. Mysids Per Test Concentration	20
12.	Feeding Regime	Light feeding (two (2) drops concentrated brine shrimp nauplii, approx. 100 nauplii per mysid twice daily).
13.	Aeration	None, unless dissolved oxygen concentration falls below 40% of saturation at which time gentle single-bubble aeration should be started.
14.	Dilution Water	Narragansett Bay water as discussed above.
15.	Dilutions	Five (5) dilutions plus a control: 100%, 50%, 25%, 12.5%, 6.25% and 0% effluent.
16.	Effect Measured and Test	Mortality - no movement of body test duration or appendages on gentle prodding, 48-hour LC_{50} and NOAEL.
17.	Test Acceptability	90% or greater survival of test organisms in control solution.
18.	Sampling Requirements	Samples are collected and used within 24 hours after the last sample of the composite is collected.
19.	Sample Volume Required	Minimum four (4) liters

[1]Adapted from EPA/600/4-90/027

8. Test Conditions for Arbacia Punctulata Fertilization Test[1]

1.	Test type	Static
2.	Salinity	30 0/00 ± 2 0/00
3.	Temperature (C)	20 ± 1°C
4.	Light quality	Ambient laboratory light during test preparation
5.	Light intensity	10-20 uE/m^2/s, or 50-100 ft-c (Ambient Laboratory Levels)
6.	Test vessel size	Disposable (glass) liquid scintillation vials (20 ml capacity), not pre-cleaned
7.	Test solution volume	5 ml
8.	Number of sea urchins	Pooled sperm from four (4) males and pooled eggs from four (4) females are used per test
9.	Number of egg and sperm cells per chamber	About 2000 eggs and 5,000,000 sperm cells per vial
10.	Number of replicate chambers per concentration	4 (minimum of 3)
11.	Dilution water	Narragansett Bay water as discussed above
12.	Dilution factor	Approximately 0.5
13.	Test duration	1 hour and 20 minutes
14.	Effects measured	Fertilization of sea urchin eggs
15.	Number of treatments per test	Minimum of five (5) effluent concentrations and a control. An additional dilution at the permitted effluent concentration (% effluent) is required.
16.	Acceptability of test results	Recommended sperm: egg ratio should result in fertilization of minimum of 70% of the eggs in the control chambers.

[1] Adapted from EPA/600/4-87/028

9. Chemical Analysis

The following chemical analysis shall be performed for every two-specie sampling event.

Parameter	Saline Effluent	Detection Diluent	Limit (mg/l)
pH	X	X	---
Specific Conductance	X	X	---
Total Solids and Suspended Solids	X	X	---
Ammonia	X		0.1
Total Organic Carbon	X		0.5
Cyanide	X		0.01
Total Phenols	X		0.05
Salinity	X	X	PPT(0/00)

During the first, second, and fourth calendar quarter bioassay sampling events the following chemical analyses shall be performed:

Total Metals	Effluent	Saline Diluent	Detection Limit (ug/l)
Total Mercury	X		0.2
Total Copper	X	X	1.0
Total Chromium (VI)	X		20.0
Total Silver	X		1.0
Total Zinc	X		20.0
Total Nickel	X		10.0
Total Lead	X	X	3.0

The above metal analyses may be used to fulfill, in part or in whole, monthly monitoring requirements in the permit for these specific metals.

During the third calendar quarter bioassay sampling event, the final effluent sample collected during the same twenty-four (24) hour period as the bioassay sample, shall be analyzed for priority pollutants (as listed in Tables II and III of Appendix D of 40 CFR 122). The bioassay priority pollutant scan shall be a full scan and may be coordinated with other permit conditions to fulfill any priority pollutant scan requirements.

10. Toxicity Test Report Elements

A report of results will include the following:

- Description of sample collection procedures and site description.
- Names of individuals collecting and transporting samples, times, and dates of sample collection and analysis.
- General description of tests: age of test organisms, origin, dates and results of standard toxicant tests (quality assurance); light and temperature regime; dilution water description; other information on test conditions if different than procedures recommended.
- The method used to adjust the salinity of the effluent must be reported.
- All chemical and physical data generated (include detection limits).
- Raw data and bench sheets.
- Any other observations or test conditions affecting test outcome.

Toxicity test data shall include the following:

Acute

- Survival for each concentration and replication at time twenty-four (24) and forty-eight (48) hours.
- LC_{50} and 95% confidence limits shall be calculated using one of the following methods in order of preference: Probit, Trimmed Spearman Karber, Moving Average Angle, or the graphical method. All printouts (along with the name of the program, the date, and the author(s)) and graphical displays must be submitted. When data is analyzed by hand, worksheets should be submitted. The report shall also include the No Observed Acute Effect Level (NOAEL) which is defined as the highest concentration of the effluent (in % effluent) in which 90% or more of the test animals survive.
- The Probit, Trimmed Spearman Karber, and Moving Average Angle methods of analyses can only be used when mortality of some of the test organisms are observed in at least two (2) of the (percent effluent) concentrations tested (i.e., partial mortality). If a test results in a 100% survival and 100% mortality in adjacent treatments ("all or nothing" effect), an LC_{50} may be estimated using the graphical method.

Chronic

- The endpoints of toxicity tests using the sea urchin are based on the reduction in percent of eggs fertilized. Chronic test data shall undergo hypothesis testing to determine if the distribution of results is normal using the Shapiro-Wilks test. The variance must also be tested for homogeneity using Bartlett's Test. Then the endpoint estimates, NOEC and LOEC must be determined using Dunnett's Procedure, Bonferroni's T-Test, Steel's Many-One Rank Test, or Wilcoxan Rank Sum Test. The choice of test depends on the number of replicates and whether the variance is homogeneous or not. See EPA/600/4-87/028 for details. (All printouts and graphics displays must be submitted along with the name of the program, the date, and the author(s). When data is analyzed by hand, the worksheets should be submitted).

- C-NOEC Chronic No Observed Effect Concentration
- LOEC Lowest Observed Effect Concentration
- MATC Maximum Allowable Toxicant Concentration

11. Special Condition

Due to the fact that the suggested dilution water for this facility to use in conducting the bioassays is from the end of the dock at the URI's Narragansett Bay Campus, enclosed is a Letter of Agreement to be signed and submitted to the Graduate School of Oceanography. Requests to use another source of dilution water will have to be approved by the Department of Environmental Management, Division of Water Resources.

12. Reporting of Bioassay Testing

Bioassay Testing shall be reported as follows:

Quarter Testing to be Performed	Report Due No Later Than	Results Submitted on DMR for
January 1 - March 31	April 15	March
April 1 - June 30	July 15	June
July 1 - September 30	October 15	September
October 1 - December 31	January 15	December

Bioassay testing following the protocol described herein shall commence during the 1st quarter (January 1 - March 31) of 2002, and the first report shall be submitted to RIDEM no later than April 15, 2002.

A signed copy of these, and all other reports required herein, shall be submitted to:

Robert Richardson, Senior Environmental Scientist
Office of Water Resources
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908-5767

C. INDUSTRIAL PRETREATMENT PROGRAM

1. Definitions

For the purpose of this permit, the following definitions apply.

a. 40 CFR 403 and sections thereof refer to the General Pretreatment regulations, 40 CFR Part 403 as revised July 24, 1990.

b. Categorical Pretreatment Standards mean any regulation containing pollutant discharge limits promulgated by the USEPA in accordance with section 307(b) and (c) of the Clean Water Act (33 USC 1251), as amended, which apply to a specific category of industrial users and which appears in 40 CFR Chapter 1, subchapter N.

c. Pretreatment Standards include all specific prohibitions and prohibitive discharge limits established pursuant to 40 CFR 403.5, including but not limited to, local limits, and the Categorical Pretreatment Standards.

d. Regulated Pollutants shall include those pollutants contained in applicable categorical standards and any other pollutants listed in the Pretreatment Standards which have reasonable potential to be present in an industrial users effluent.

2. Implementation

The authority and procedures of the Industrial Pretreatment Program shall at all times be fully and effectively exercised and implemented, in compliance with the requirements of this permit and in accordance with the legal authorities, policies, procedures and financial provisions described in the permittee's approved Pretreatment Program and Sewer Use Ordinance, the Rhode Island Pretreatment Regulations and the General Pretreatment Regulations 40 CFR 403. The permittee shall maintain adequate resource levels to accomplish the objectives of the Pretreatment Program.

3. Local Limits

Pollutants introduced into POTWs by a non-domestic source (user) shall not: pass through the POTW, interfere with the operation or performance of the works, contaminate sludge as to adversely effect disposal options, or adversely effect worker safety and health.

a. The permittee shall submit to the DEM a full technically-based local limits evaluation with the Final Metals Compliance Report, required by Consent Agreement RIA-029, as amended. The evaluation must address all pollutants in the permittee's Rules and Regulations and whether the permittee will need to revise its current local limits in order to meet the discharge requirements contained in this permit, meet the permittee's current sludge disposal option criteria, protect against WWTF interference, and ensure protection of WWTF worker health and safety. If revision is required, the evaluation shall contain proposed numerical limitations developed by the permittee in accordance with the procedures set forth in the EPA's December, 1987 Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program and the May, 1991 EPA Supplemental Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program or alternative supplemental methods and procedures as approved by RIDEM, e.g., as may be issued by EPA to supplement or replace the existing guidance. All supporting data and calculations must be submitted with the evaluation. Upon review, the DEM will provide written notification either granting preliminary approval of the local limits evaluation or stating the deficiencies revealed therein. Should the DEM determine that a deficiency exists in the local limits evaluation submittal, the permittee shall submit to the DEM, within thirty (30) days of the receipt of said notice (unless a longer timeframe is specified therein), a revised evaluation consistent with the DEM's notice of deficiency.

b. Should the evaluation determine the need to revise local limits, within sixty (60) days of the receipt of preliminary approval of the proposed limits, the permittee shall submit to the DEM a request for a pretreatment program modification in accordance with 40 CFR 403.18 and Part C.5.e of this permit. Upon final approval by the DEM and adoption by the permittee, these limits shall be deemed Pretreatment Standards for the purposes of Section 307(d) of the Clean Water Act. No longer than thirty (30) days (unless a longer timeframe is

specified) following the DEM's final approval of the proposed local limits, the permittee shall commence implementation of the revised local limits.

4. Enforcement Response Plan (ERP)

a. Within ninety (90) days of the effective date of this permit, the permittee shall submit to the DEM an updated Enforcement Response Plan (ERP) in accordance with 40 CFR 403.8(f)(5), 40 CFR 403.18(b)(1)(i), 40 CFR 403.20, and Part C.5.e. of this permit.

b. DEM will review the updated ERP in accordance with Part C.5.e of this permit. Within thirty (30) days of final approval of the ERP, the permittee shall commence implementation of the ERP. Upon final approval by the DEM and adoption by the permittee, these modifications shall become part of the approved pretreatment program and shall be incorporated into this permit in accordance with 40CFR 122.63(g).

5. General

a. The permittee shall carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with Pretreatment Standards. At a minimum, all significant industrial users shall be inspected and monitored for all regulated pollutants (as determined by the permittee's approved Industrial Pretreatment Program on a case-by-case basis) at the frequency established in the approved Industrial Pretreatment Program but in no case less than once per year (one (1) year being determined as the reporting year established in Part I.C.7 of this permit). In addition, these inspections, monitoring and surveillance activities must be conducted in accordance with EPA's Industrial User Inspection and Sampling Manual for POTW's, April 1994. All inspections, monitoring, and surveillance activities shall be performed, and have records maintained, with sufficient care to produce evidence admissible in enforcement proceedings or judicial actions. The permittee shall evaluate, at least every two years, whether each SIU requires a slug control plan. If a slug control plan is required, it must include, at a minimum, those elements contained in 40 CFR 403.8(f)(2)(v).

b. The permittee shall reissue all necessary Industrial User (IU) control mechanisms within thirty (30) days after their expiration date. The permittee shall issue, within sixty (60) days after the determination that an IU is a Significant Industrial User (SIU), all SIU control mechanisms. All SIU control mechanisms must contain, at a minimum, those conditions stated in 40 CFR 403.8(f)(1)(iii). All control mechanisms must be mailed via Certified Mail, Return Receipt Requested or alternatively hand-delivered, providing that receipt of delivery acceptance is documented. A complete bound copy of the control mechanism with the appropriate receipt must be kept as part of the Industrial User's permanent file. In addition, the permittee must develop a fact sheet describing the basis for the SIU's permit and retain this fact sheet as part of the SIU's permanent file.

c. The permittee must identify each instance of noncompliance with any pretreatment standard and/or requirement and take a formal documented action for each instance of noncompliance. Copies of all such documentation must be maintained in the Industrial User's permanent file.

d. The permittee shall prohibit Industrial Users from the dilution of a discharge as a substitute for adequate treatment in accordance with 40 CFR 403.6(d).

e. The permittee shall comply with the procedures of 40 CFR 403.18 for instituting any modifications of the permittee's approved Pretreatment Program. Significant changes in the operation of a POTW's Approved Pretreatment Program must be

submitted and approved following the procedures outlined in 40 CFR 403.18(b) and 403.9(b). However, the endorsement of local officials responsible for supervising and/or funding the pretreatment program required by 403.9(b)(2) will not be required until DEM completes a preliminary review of the submission. The DEM will evaluate and review the permittee's initial proposal for a modification and provide written notification either granting preliminary approval of the proposed modifications or stating the deficiencies contained therein. DEM's written notification will also include a determination whether the submission constitutes a substantial or non-substantial program modification as defined by 40 CFR 403.18. Should DEM determine that a deficiency exists in the proposed modification, the permittee shall submit to DEM, within thirty (30) days of the receipt of said notice, a revised submission consistent with DEM's notice of deficiency.

Pretreatment program modifications which the permittee considers Non-substantial, shall be deemed to be approved within (90) days after submission of the request for modification, unless DEM determines that the modification is in fact a substantial modification or notifies the permittee of deficiencies. Upon receipt of notification that DEM has determined the modification is substantial, the permittee shall initiate the procedures and comply with the deadlines for substantial modifications, which are outlined below.

For substantial modifications, the permittee shall, within sixty (60) days (unless a longer time frame is granted) of the receipt of DEM's preliminary approval of the proposed modification, submit a statement (as required by 403.9(b)(2)) that any local public notification/participation procedures required by local law have been completed and upon approval by RIDEM, the local officials will endorse and/or approve the modification.

Within thirty (30) days of DEM's final approval of the proposed modification(s), the permittee shall implement the modification. Upon final approval by the DEM and adoption by the permittee, this modification(s) shall become part of the approved pretreatment program and shall be incorporated into this permit in accordance with 40CFR 122.63(g).

f. All sampling and analysis required of the permittee, or by the permittee of any Industrial User, must be performed in accordance with the techniques described in 40 CFR 136.

g. For those Industrial Users with discharges that are not subject to Categorical Pretreatment Standards, the permittee shall require appropriate reporting in accordance with 40 CFR 403.12(h).

h. The permittee shall, in accordance with 40 CFR 403.12(f), require all Industrial Users to immediately notify the permittee of all discharges by the Industrial User that could cause problems to the POTW, including slug loadings, as defined by 40 CFR 403.5(b).

i. The permittee shall require all Industrial Users to notify the permittee of substantial changes in discharge as specified in 40 CFR 403.12(j).

j. The permittee shall require New Sources to install and have in operation all pollution control equipment required to meet applicable Pretreatment Standards before beginning to discharge. In addition, the permittee shall require New Sources to meet all applicable Pretreatment Standards within the shortest feasible time which shall not exceed ninety (90) days in accordance with 40 CFR 403.6(b).

k. The permittee shall require all Industrial Users who are required to sample their effluent and report the results of analysis to the POTW to comply with signatory requirements contained in 40 CFR 403.12(l) when submitting such reports.

l. The permittee shall determine, based on the criteria set forth in 40 CFR 403.8(f)(2)(vii), using the EPA method of "rolling quarters", the compliance status of each Industrial User. Any Industrial User determined to meet Significant Non-Compliance (SNC) criteria shall be included in an annual public notification as specified in 40 CFR 403.8(f)(2)(vii).

m. The permittee shall require Industrial Users to comply with the notification and certification requirements of 40 CFR 403.12(p)(1), (3) and (4) pertaining to the discharge of substances to the POTW, which if disposed of otherwise, would be a hazardous waste under 40 CFR Part 261.

n. The permittee shall continue to designate, as SIUs, those Industrial Users (IUs) which meet the definition contained in the permittee's sewer use ordinance.

The permittee shall notify each newly designated SIU of its classification as an SIU within thirty (30) days of identification and shall inform the SIU of the requirements of an SIU contained in 40 CFR 403.12.

6. Categorical Industrial Users (CIUs)

a. The permittee shall require Industrial Users to comply with applicable Categorical Pretreatment Standards in addition to all applicable Pretreatment Standards and Requirements. The permittee shall require of all Categorical Industrial Users (CIUs), all reports on compliance with applicable Categorical Pretreatment Standards and Categorical Pretreatment Standard deadlines as specified in and in accordance with Sections (b), (d), (e) and (g) of 40 CFR 403.12. In addition, the permittee shall require Categorical Industrial Users to comply with the report signatory requirements contained in 40 CFR 403.12(1) when submitting such reports.

b. If the permittee applies the Combined Wastestream Formula (CWF) to develop fixed alternative discharge limits of Categorical Pretreatment Standards, the application of the CWF and the enforcement of the resulting limits must comply with 40 CFR 403.6(e). The permittee must document all calculations within the control mechanism fact sheet and the resulting limits within the CIU's control mechanism. The permittee must ensure that the most stringent limit is applied to the CIU's effluent at end-of-pipe based upon a comparison of the resulting CWF limits and the permittee's local limits.

c. If the permittee has or obtains the authority to apply and enforce equivalent mass-per-day and/or concentration limitations of production-based Categorical Pretreatment Standards, then the permittee shall calculate and enforce the limits in accordance with 40 CFR 403.6(c). The permittee must document all calculations within the control mechanism fact sheet and the resulting limits within the CIU's control mechanism.

7. Annual Report

The annual report for the permittee's program shall contain information pertaining to the reporting year which shall extend from January 1st through December 31st and shall be submitted to the DEM by March 15th. Each item below must be addressed separately and any items which are not applicable must be so indicated. If any item is deemed not applicable a brief explanation must be provided. The annual report shall include the following information pertaining to the reporting year:

a. A listing of Industrial Users which complies with requirements stated in 40 CFR 403.12(i)(1). The list shall identify all Categorical Industrial Users, Significant Industrial Users and any other categories of users established by the permittee;

b. A summary list of any notifications received by the permittee of any substantial change in the volume or character of pollutants being introduced into the POTW by new or existing IUs. If applicable, an evaluation of the quality and quantity of influent introduced into the POTW and any anticipated impact due to the changed discharge on the quantity or quality of effluent to be discharged from the POTW shall be included;

c. A summary of Industrial User Compliance status. The summary shall identify the IUs determined to be in non-compliance, and if applicable, the type of enforcement actions taken and penalty amounts levied.

d. A list of industries which were determined, in accordance with Part I.C.5.(l) of this permit, to be in significant non-compliance required to be published in a local newspaper and a copy of an affidavit of publication, from the newspaper, averring that the names of these violators has been published;

e. A summary list of inspection and monitoring activity performed by the permittee, including:

- significant industrial users inspected by the POTW (include inspection dates for each industrial user);
- significant industrial users sampled by the POTW (include sampling dates for each industrial user);

f. A summary list of permit issuance/reissuance activities including the name of the industrial user, expiration date of previous permit and issuance date of new permit;

g. A list including the report/notification type, due date, and receipt date for each report/notification required by 40 CFR 403.12.

h. A summary of public participation efforts including meetings and workshops held with the public and/or industry and notices/newsletters/bulletins published and/or distributed;

i. A program evaluation in terms of program effectiveness, local limits application and resources which addresses but is not limited to:

- A description of actions being taken to reduce the incidence of SNC by Industrial Users;
- effectiveness of enforcement response program;
- sufficiency of funding and staffing;
- sufficiency of the SUO, Rules and Regulations, and/or statutory authority;

j. An evaluation of recent/proposed program modifications, both substantial and non-substantial, in terms of the modification type, implementation and actual/ expected effect (note proposed modifications must be submitted under separate cover along with the information required by 40 CFR 403.18);

k. A detailed description of all interference and pass-through that occurred during the past year and, if applicable;

- A thorough description of all investigations into interference and pass-through during the past year;

- A description of the monitoring, sewer inspections and evaluations which were done during the past year to detect interference and pass-through, specifying pollutants analyzed and frequencies;

l. A summary of the average, maximum concentration, minimum concentration, and number of data points used for pollutant analytical results for influent, effluent, sludge and any toxicity or bioassay data from the wastewater treatment facility. The summary shall include a comparison of influent sampling results versus the maximum allowable headworks loadings contained in the approved local limits evaluation and effluent sampling results versus water quality standards. Such a comparison shall be based on the analytical results required in Parts I.A and I.C. of this permit and any additional sampling data available to the permittee; and

m. A completed pretreatment annual report summary (PARS) form or a comparable form approved by DEM, provided that it contains all of the information specified in the PARS form. (Attachment A-1 contains a copy of the PARS form, this form MUST be used).

D. COMBINED SEWER OVERFLOWS (CSOs)

1. EFFLUENT LIMITATIONS

a. During wet weather, the permittee is authorized to discharge from combined sewer outfalls (CSOs) 002A, 101A - 107A, and 201A - 220A listed in Part I.D.3, subject to the following:

i. The discharges shall comply with the EPA and RIDEM CSO Policies.

ii. The discharges shall receive treatment at a level providing Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT) to control and abate conventional pollutants and Best Available Technology Economically Achievable (BAT) to control and abate non-conventional and toxic pollutants. The RIDEM and EPA have made a Best Professional Judgement (BPJ) determination that BPT, BCT, and BAT for combined sewer overflow (CSO) control include the implementation of Nine Minimum Controls (NMC) specified below and detailed further in Part I.D.2. "Nine Minimum Controls, Minimum Implementation Levels" of this permit:

1. Proper operation and regular maintenance programs for the sewer system and the combined sewer overflows.

2. Maximum use of the collection system for storage.

3. Review and modification of the pretreatment program to assure CSO impacts are minimized.

4. Maximization of flow to the POTW for treatment.

5. Prohibition of dry weather overflows from CSOs.

6. Control of solid and floatable materials in CSO.

7. Pollution prevention programs that focus on contaminant reduction activities.

8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts.

9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

2. Nine Minimum Controls, Minimum Implementation Levels

a. The Permittee must implement the nine minimum controls in accordance with the documentation provided to EPA and RIDEM or as subsequently modified to enhance the effectiveness of the controls. This implementation must include the following controls plus other controls the Permittee can reasonably implement as set forth in the documentation.

b. The direct discharge of holding tank wastes and septage to a CSO is prohibited. Discharges of holding tank wastes and septage into the sewer system must be at locations which minimize the likelihood of concentrated wastes being discharged from CSOs.

c. Dry weather overflows (DWOs) are prohibited. All dry weather sanitary and/or industrial discharges from CSOs must be reported to RIDEM within twenty-four (24) hours in accordance with the reporting requirements for plant bypass (Paragraph M of Part II of this permit).

d. The Permittee shall provide public awareness of all occurrences of a bypass of the treatment facility. The public awareness shall be provided by raising a red flag, with a minimum size of three feet by five feet (3' X 5'), at the outfall. The flag shall be raised at the onset of a facility bypass of any volume or after a failure in chlorination during which time at least 500,000 gallons are discharged. The flag shall be kept raised for five (5) continuous days after each bypass or failure in chlorination. Within thirty (30) days of the effective date of this permit, the permittee shall provide public notice in the Legal Section of the Providence Journal explaining the flag raising procedure. The wording for the Providence Journal notice shall be in accordance with the wording approved in the RIDEM's April 21, 1992 letter.

e. NBC shall maintain CSO identification signs at each CSO in the Bucklin Point Service Area. The signs must comply with the minimum requirement as approved by RIDEM.

f. Operation and maintenance of the sewer system:

1. All collection system pump stations in the permittee’s service area shall be inspected at least weekly and all pump station generators shall be inspected a minimum of twice per year.

2. All regulators shall be inspected at least twice a month.

3. All sumps in the Bucklin Point Service Area associated with CSO regulators shall be cleaned quarterly.

4. A report on combined sewer overflow/regulator maintenance and repair during the previous six (6) months shall be submitted to the RIDEM, Office of Water Resources, by the 15th of January and July of each year. The report shall include which structures were checked and when, the condition of each one, which were reported and when, which ones must yet be repaired, the reasons any repair was delayed, and the anticipated repair schedule. The first report is due July 15th, 2002.

g. Control of Solids and Floatable Materials

1. Within fifteen (15) months of completing construction of the trash net system at the Bucklin Brook Overflow, no later than February 15, 2003, a report shall be submitted to the RIDEM that includes the following:

i. An evaluation of the effectiveness and cost of the pilot study trash net system as compared to alternative technologies.

ii. A recommendation of the technology alternative to be used for the control of solids and floatables from CSOs.

iii. An implementation schedule for the installation of the recommended alternative on all CSOs that were part of Phases II and III of the approved Long Term Control Plan entitled “Concept Design Report Amendment” and dated July 12, 1999.

3. Combined Sewer Overflows or Emergency Bypasses

Discharge Serial No.	Location	Maximum Daily Flow That Could Be Discharged	Discharge Type	Receiving Water
002A	North Diversion Structure Structure (Bucklin Point)	Flows exceeding 60 MGD	Combined Sewer Overflow/Emergency Bypass	Seekonk River
101A	River Street at Samoset Street Central Falls, RI	23.30 MGD	Combined Sewer Overflow	Blackstone River
102A	New Haven Ave. at Samoset Street Central Falls, RI	1.42 MGD	Combined Sewer Overflow	Blackstone River
103A	Aigan Street at High Street Central Falls, RI	90.33 MGD	Combined Sewer Overflow	Blackstone River
104A	Charles Street at Sacred Heart Ave. Central Falls, RI	133.2 MGD	Combined Sewer Overflow	Blackstone River
105A	Cross Street at Roosevelt Avenue Central Falls, RI	62.86 MGD	Combined Sewer Overflow	Blackstone River
106A	Higginsen Ave. (2 pipes) Central Falls, RI	73.76 MGD (total)	Combined Sewer Overflow	Blackstone River
107A	Dexter Street (107A) Hunt Street (107B) (combine into CSO in Richmond Street - 107 Central Falls, RI	50.90 MGD (total)	Combined Sewer Overflow	Blackstone River
201A	East Street west of Branch Street Pawtucket, RI	161.5 MGD	Combined Sewer Overflow	Blackstone River
202A	Beneath Roosevelt Ave. Bridge west of Japonica Street Pawtucket, RI	161.5 MGD	Combined Sewer Overflow	Blackstone River
203A	Carnation Street west of Front Street, Pawtucket, RI	unknown	Combined Sewer Overflow	Blackstone River

3. Combined Sewer Overflows or Emergency Bypasses (continued)

Discharge Serial No.	Location	Maximum Daily Flow That Could Be Discharged	Discharge Type	Receiving Water
204A	North Side of Central Avenue northwest of its intersection with Front Street, Pawtucket, RI	17.1 MGD	Combined Sewer Overflow (36" pipe)	Blackstone River
205A	Central Avenue west of its intersection with Front Street Pawtucket, RI	239.0 MGD	Combined Sewer Overflow (54" pipe)	Blackstone River
206A	Blackstone Avenue east of Roosevelt Avenue, Pawtucket, RI	unknown	Combined Sewer Overflow	Blackstone River
207A	Blackstone Avenue west of Front Street, Pawtucket, RI	unknown	Combined Sewer Overflow	Blackstone River
208A	Exchange Street east of Roosevelt Avenue, Pawtucket, RI	unknown	Combined Sewer Overflow	Blackstone River
209A	Exchange Street west of Fountain Street, Pawtucket, RI	12.3 MGD	Combined Sewer Overflow	Blackstone River
210A	Main Street between East Avenue and the west abutment of the Main Street Bridge, Pawtucket, RI	80.8 MGD	Combined Sewer Overflow	Blackstone River
211A	Main Street between East Avenue and west abutment of the Main Street Bridge, Pawtucket, RI	62.0 MGD	Combined Sewer Overflow (42" pipe serves as a relief valve for Outfall 210)	Blackstone River
212A	Main Street between diversion structure on Broadway and east abutment on the Main Street Bridge, Pawtucket, RI	unknown	Combined Sewer Overflow	Blackstone River
213A	Easement area extending east of the intersection of East Avenue and Pleasant Street, Pawtucket, RI	203.5 MGD	Combined Sewer Overflow (48" pipe)	Seekonk River

3. Combined Sewer Overflows or Emergency Bypasses (continued)

Discharge Serial No.	Location	Maximum Daily Flow That Could Be Discharged	Discharge Type	Receiving Water
214A	Roosevelt Avenue Extension east of Pleasant Street Pawtucket, RI	unknown	Combined Sewer Overflow	Seekonk River
215A	Division Street between east bridge abutment & diversion structure (#18) Pawtucket, RI	71.1 MGD	Combined Sewer Overflow	Seekonk River
216A	Between intersection of School Street and Woodlawn Avenue, Pawtucket, RI	45.9 MGD	Combined Sewer Overflow	Seekonk River
217A	Overflow from diversion structures at Taft (#10) & Merry (#11) Streets through an easement to the west bank of the river, Pawtucket, RI	38.8 MGD	Combined Sewer Overflow	Seekonk River
218A	Bucklin Brook overflow Pawtucket, RI	258.4 MGD	Combined Sewer Overflow	Seekonk River
219A	Esten Street Pawtucket, RI	74.3 MGD	Combined Sewer Overflow	Moshassuck River
220A	Moshassuck Street Pawtucket, RI	145.4 MGD	Combined Sewer Overflow	Moshassuck River

E. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Infiltration/Inflow

The permittee shall minimize infiltration/inflow to the sewer system. A summary report of all actions taken to minimize infiltration/inflow during the previous year shall be submitted to RIDEM, Office of Water Resources, by the 15th day of January of each year. The first report is due January 15, 2003.

3. Combined Sewer Overflows and Bypasses

The permittee shall operate and improve the sewer system to minimize the discharge of pollutants from combined sewer overflows and bypasses.

F. SLUDGE

The permittee shall conform and adhere to all conditions, practices and regulations as contained in the State of Rhode Island Rules and Regulations for the Treatment, Disposal, Utilization and Transportation of Sewage Sludge. The permittee shall comply with its RIDEM Order of Approval for the disposal of sludge.

G. DETECTION LIMITS

The permittee shall assure that all **wastewater** testing required by this permit, is performed in conformance with the method detection limits below **(the EPA method is noted for reference, other EPA approved methods found in 40 CFR Part 136 may be utilized). All sludge testing required by this permit shall be in conformance with the method detection limits found in 40 CFR 503.8.** In accordance with 40 CFR Part 136, EPA approved analysis techniques, quality assurance procedures and quality control procedures shall be followed for all reports required to be submitted under the RIPDES program. These procedures are described in "Methods for the Determination of Metals in Environmental Samples" (EPA/600/4-91/010) and "Methods for Chemical Analysis of Water and Wastes" (EPA/600/4-79/020).

The report entitled "Methods for the Determination of Metals in Environmental Samples" includes a test which must be performed in order to determine if matrix interferences are present, and a series of tests to enable reporting of sample results when interferences are identified. Each step of the series of tests becomes increasingly complex, concluding with the complete Method of Standard Additions analysis. The analysis need not continue once a result which meets the applicable quality control requirements has been obtained. Documentation of all steps conducted to identify and account for matrix interferences shall be submitted along with the monitoring reports.

If, after conducting the complete Method of Standard Additions analysis, the laboratory is unable to determine a valid result, the laboratory shall report "could not be analyzed." Documentation supporting this claim shall be submitted along with the monitoring report. If valid analytical results are repeatedly unobtainable, DEM may require that the permittee determine a method detection limit (MDL) for their effluent or sludge as outlined in 40 CFR Part 136, Appendix B.

Therefore, all sample results shall be reported as: an actual value, "could not be analyzed", less than the reagent water MDL, or less than an effluent or sludge specific MDL. The effluent or sludge specific MDL must be calculated using the methods outlined in 40 CFR Part 136, Appendix B. Samples which have been diluted to ensure that the sample concentration will be within the linear dynamic range shall not be diluted to the extent that the analyte is not detected. If this should occur the analysis shall be repeated using a lower degree of dilution.

When calculating sample averages for reporting on discharge monitoring reports (DMRs):

1. "could not be analyzed" data shall be excluded, and shall not be considered as failure to comply with the permit sampling requirements;

2. results reported as less than the MDL shall be included as values equal to the MDL, and the average shall be reported as "less than" the calculated value.

For compliance purposes, DEM will replace all data reported less than the MDL with zeroes, provided that DEM determines that all appropriate EPA approved methods were followed. If the recalculated average exceeds the permit limitation it will be considered a violation.

LIST OF TOXIC POLLUTANTS

The following list of toxic pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act. The Method Detection limits (MDLs) represent the required Rhode Island MDLs.

Volatiles - EPA Method 624		MDL ug/l (ppb)
1V	acrolein	10.0
2V	acrylonitrile	5.0
3V	benzene	1.0
5V	bromoform	1.0
6V	carbon tetrachloride	1.0
7V	chlorobenzene	1.0
8V	chlorodibromomethane	1.0
9V	chloroethane	1.0
10V	2-chloroethylvinyl ether	5.0
11V	chloroform	1.0
12V	dichlorobromomethane	1.0
14V	1,1-dichloroethane	1.0
15V	1,2-dichloroethane	1.0
16V	1,1-dichloroethylene	1.0
17V	1,2-dichloropropane	1.0
18V	1,3-dichloropropylene	1.0
19V	ethylbenzene	1.0
20V	methyl bromide	1.0
21V	methyl chloride	1.0
22V	methylene chloride	1.0
23V	1,1,2,2-tetrachloroethane	1.0
24V	tetrachloroethylene	1.0
25V	toluene	1.0
26V	1,2-trans-dichloroethylene	1.0
27V	1,1,1-trichloroethane	1.0
28V	1,1,2-trichloroethane	1.0
29V	trichloroethylene	1.0
31V	vinyl chloride	1.0

Acid Compounds-EPA Method 625		MDL ug/l (ppb)
1A	2-chlorophenol	1.0
2A	2,4-dichlorophenol	1.0
3A	2,4-dimethylphenol	1.0
4A	4,6-dinitro-o-cresol	1.0
5A	2,4-dinitrophenol	2.0
6A	2-nitrophenol	1.0
7A	4-nitrophenol	1.0
8A	p-chloro-m-cresol	2.0
9A	pentachlorophenol	1.0
10A	phenol	1.0
11A	2,4,6-trichlorophenol	1.0

Pesticides-EPA Method 608		MDL ug/l (ppb)
1P	aldrin	0.059
2P	alpha-BHC	0.058
3P	beta-BHC	0.043
4P	gamma-BHC	0.048
5P	delta-BHC	0.034
6P	chlordane	0.211
7P	4,4 ' -DDT	0.251
8P	4,4 ' -DDE	0.049
9P	4,4 ' -DDD	0.139
10P	dieldrin	0.082
11P	alpha-endosulfan	0.031
12P	beta-endosulfan	0.036
13P	endosulfan sulfate	0.109
14P	endrin	0.050
15P	endrin aldehyde	0.062
16P	heptachlor	0.029
17P	heptachlor epoxide	0.040

Pesticides-EPA method 608		MDL ug/l (ppb)
18P	PCB-1242	0.289
19P	PCB-1254	0.298
20P	PCB-1221	0.723
21P	PCB-1232	0.387
22P	PCB-1248	0.283
23P	PCB-1260	0.222
24P	PCB-1016	0.494
25P	toxaphene	1.670

Base/Neutral-EPA Method 625		MDL ug/l (ppb)
1B	acenaphthene*	1.0
2B	acenaphthylene*	1.0
3B	anthracene*	1.0
4B	benzidine	4.0
5B	benzo(a)anthracene*	2.0
6B	benzo(a)pyrene*	2.0
7B	3,4-benzofluoranthene*	1.0
8B	benzo(ghi)perylene*	2.0
9B	benzo(k)fluoranthene*	2.0
10B	bis(2-chloroethoxy)methane	2.0
11B	bis(2-chloroethyl)ether	1.0
12B	bis(2-chloroisopropyl)ether	1.0
13B	bis(2-ethylhexyl)phthalate	1.0
14B	4-bromophenyl phenyl ether	1.0
15B	butylbenzyl phthalate	1.0
16B	2-chloronaphthalene	1.0
17B	4-chlorophenyl phenyl ether	1.0
18B	chrysene*	1.0
19B	dibenzo (a,h)anthracene*	2.0
20B	1,2-dichlorobenzene	1.0
21B	1,3-dichlorobenzene	1.0
22B	1,4-dichlorobenzene	1.0
23B	3,3 ' -dichlorobenzidine	2.0
24B	diethyl phthalate	1.0
25B	dimethyl phthalate	1.0
26B	di-n-butyl phthalate	1.0
27B	2,4-dinitrotoluene	2.0
28B	2,6-dinitrotoluene	2.0
29B	di-n-octyl phthalate	1.0
30B	1,2-diphenylhydrazine (as azobenzene)	1.0
31B	fluoranthene*	1.0
32B	fluorene*	1.0
33B	hexachlorobenzene	1.0
34B	hexachlorobutadiene	1.0
35B	hexachlorocyclopentadiene	2.0
36B	hexachloroethane	1.0
37B	indeno(1,2,3-cd)pyrene*	2.0
38B	isophorone	1.0
39B	naphthalene*	1.0
40B	nitrobenzene	1.0
41B	N-nitrosodimethylamine	1.0
42B	N-nitrosodi-n-propylamine	1.0
43B	N-nitrosodiphenylamine	1.0
44B	phenanthrene*	1.0
45B	pyrene*	1.0
46B	1,2,4-trichlorobenzene	1.0

OTHER TOXIC POLLUTANTS

	MDL ug/l (ppb)
Antimony, Total	5.0 - EPA Method 200.9
Arsenic, Total	5.0 - EPA Method 200.9
Beryllium, Total	0.2 - Standard Methods 18th Ed. 3113B
Cadmium, Total	1.0 - EPA Method 200.9
Chromium, Total	1.0 - EPA Method 218.2[1]
Chromium, Hexavalent***	20.0 - Standard Methods 18th Ed. 3500-CR.D.
Copper, Total	1.0 - EPA Method 220.2[1]
Lead, Total	3.0 - EPA Method 200.9
Mercury, Total	0.2 - EPA Method 245.1[1]
Nickel, Total	10.0 - EPA Method 200.7
Selenium, Total	5.0 - EPA Method 200.9
Silver, Total	1.0 - Standard Methods 18th Ed. 3113B
Thallium, Total	5.0 - EPA Method 200.9
Zinc, Total	20.0 - EPA Method 200.7
Asbestos	**
Cyanide, Total	10.0 - EPA Method 335.3
Phenols, Total***	50.0 - EPA Method 420.2
TCDD	**
MTBE (Methyl Tert Butyl Ether)	1.0 - EPA Method 524.2

*Polynuclear Aromatic Hydrocarbons
**No Rhode Island Department of Environmental Management (RIDEM) MDL
***Not a priority pollutant as designated in the 1997 Water Quality Regulations (Table 5)

NOTE:

All MDLs have been established in accordance with the definition of "Detection Limits" in the RIDEM Water Quality Regulations for Water Pollution Control. Unless otherwise noted the MDLs have been determined in reagent water by the Rhode Island Department of Health, Division of Laboratories. The MDL for a given analyte may vary with the type of sample. MDLs, which are determined in reagent water, may be lower than those determined in wastewater due to fewer matrix interferences. Wastewater is variable in composition and may therefore contain substances (interferents) that could affect MDLs for some analytes of interest. Variability in instrument performance can also lead to inconsistencies in determinations of MDLs.

[1]Method detection limits for these metals were determined by the USEPA. They are not contrived values and should be obtainable with any satisfactory atomic absorption spectrophotometer. To insure valid data the analyst must analyze for matrix interference effects and if detected treat accordingly using either successive dilution matrix modification of Standard Additions (Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020).

To help verify the absence of matrix or chemical interference the analyst is required to complete specific quality control procedures. For the metals analyses listed above the analyst must withdraw from the sample two equal aliquots; to one aliquot add a known amount of analyte, and then dilute both to the same volume and analyze. The unspiked aliquot multiplied by the dilution factor should be compared to the original. Agreement of the results within 10% indicates the absence of interference. Comparison of the actual signal from the spiked aliquot to the expected response from the analyte in an aqueous standard should help confirm the finding from the dilution analysis. (Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020).

For Methods 624 and 625 the laboratory must on an ongoing basis, spike at least 5% of the samples from each sample site being monitored. For laboratories analyzing 1 to 20 samples per month, at least one spiked sample per month is required. The spike should be at the discharge permit limit or 1 to 5 times higher than the background concentration determined in Section 8.3.2, whichever concentration would be larger. (40 CFR Part 136 Appendix B Method 624 and 625 subparts 8.3.1 and 8.3.11).

H. MONITORING AND REPORTING

1. Monitoring

   All monitoring required by this permit shall be done in accordance with sampling and analytical testing procedures specified in Federal Regulations (40 CFR Part 136).

2. Reporting

   Monitoring results obtained during the previous month shall be summarized and reported on Discharge Monitoring Report (DMR) Forms, postmarked no later than the 15th day of the month following the completed reporting period. The first report is due on March 15, 2002. Signed copies of these, and all other reports required herein, shall be submitted to:

Annie McFarland
Office of Water Resources
RIPDES Program
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 PROMENADE STREET
PROVIDENCE, RHODE ISLAND 02908-5767

FACT SHEET

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) PERMIT TO DISCHARGE TO WATERS OF THE STATE

RIPDES PERMIT NO. **RI0100072**

NAME AND ADDRESS OF APPLICANT:

The Narragansett Bay Commission
One Service Road
Providence, Rhode Island 02905

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Bucklin Point Wastewater Treatment Facility
102 Campbell Avenue
East Providence, Rhode Island
And
Associated Combined Sewer Overflows

RECEIVING WATERS: **Seekonk, Moshassuck, and Blackstone Rivers**

CLASSIFICATION: **SB1{a}; B1{a} & B{a}**

I. Proposed Action, Type of Facility, and Discharge Location

The above-named applicant has applied to the Rhode Island Department of Environmental Management for reissuance of a RIPDES Permit to discharge into the designated receiving water. The facility is engaged in the treatment of domestic and industrial sewage. The discharge is from the Bucklin Point Wastewater Treatment Facility and the Combined Sewer Overflows associated with the wastewater treatment facility's collection system.

II. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters based on DMR data from January 1996 through June 2001 is shown on Attachment A-2.

III. Permit Limitations and Conditions

The final effluent limitations and monitoring requirements may be found in the draft permit. The NBC is currently subject to a Compliance Order RIO-052 and Consent Agreement RIA-029.

IV. Permit Basis and Explanation of Effluent Limitation Derivation

The Narragansett Bay Commission owns and operates the Bucklin Point Wastewater Treatment Facility (WWTF) located on Campbell Avenue in East Providence, Rhode Island and several associated Combined Sewer Overflows (CSOs). The discharge from the WWTF to Seekonk River consists of treated sanitary sewage and commercial and industrial wastewater. Treatment consists of Screening, Grit Removal, Pre-aeration, Primary Settling, Activated Sludge, Secondary Settling, Chlorination, and Dechlorination.

The requirements set forth in this permit are from the State's Water Quality Regulations and the State's Regulations for the Rhode Island Pollutant Discharge Elimination System, both filed pursuant to RIGL Chapter 46-12, as amended. RIDEM's primary authority over the permit comes from EPA's delegation of the program in September 1984 under the Clean Water Act (CWA).

Development of RIPDES permit limitations is a multi-step process consisting of: determining if Federal effluent guidelines apply; calculation of allowable discharge levels based on background data and available dilution; comparing existing and proposed limits; comparing discharge data to proposed limits; and developing interim limits as appropriate. A brief description of these steps is presented below. For a more detailed presentation, the "Narragansett Bay Commission - Bucklin Point Wastewater Treatment Facility Permit Development Document" is available upon request.

The "Average Monthly" and "Average Weekly" BOD_5 and TSS limitations plus the pH limitations are based upon the secondary treatment requirements of Section 301 (b)(1)(B) of the CWA as defined in 40 CFR 133.102 (a) - (c). The "Maximum Daily" BOD_5 and TSS limits and the fecal coliform limits are based on Rhode Island requirements for Publicly Owned Treatment Works (POTW's) under Section 401 (a)(1) of the CWA and in 40 CFR 124.53 and 124.56. The "Percent Removal" requirements are in accordance with 40 CFR 133.103. Settleable Solids monitoring has been included as a process-control parameter that can aid in the assessment of the operation of the plant but need not have an effluent limit. Oil and Grease monitoring have been included to ensure that the WWTF's collection system will not experience blockages due to excessive levels of grease and to ensure that the WWTF will not experience inhibition.

In order to evaluate the need for water quality based limits, it is necessary to determine the mixing which occurs in the immediate vicinity of the discharge (initial dilution). The WWTF's effluent is discharged through an 8' x 10' pipe. As presented in the Wastewater Treatment Facility's Development Document it was determined that a mixing zone and a corresponding dilution factor is acceptable for the effluent from the Treatment Facility. Based on the analysis of a Dye Study (September 1991) a chronic dilution factor of 2 with a mixing zone of 300 feet in radius and an acute dilution factor of 1 (no dilution) with a mixing zone of 25 feet in radius were deemed appropriate.

Based on the above dilution factors and the saltwater aquatic life and non-class A human health criteria, from the Rhode Island Water Quality Regulations and the 1986 EPA Quality Criteria for Water (the "gold book"), allowable discharge concentrations were established using 80% allocation when no background data was available and 90% allocation when background data was available. 100% allocation of total residual chlorine (TRC) was used due to the fact that Chlorine is not expected to be found in ambient water and it is a non-conservative pollutant. Background data, for Cadmium, Chromium, Copper, Lead, Nickel, and Silver, was obtained from the four SINBADD cruises in Current Report #: NBP-89-22.

In accordance with 40 CFR Part 122.4(d)(1)(iii), it is only necessary to establish limitations for those pollutants in the discharge which have the reasonable potential to cause or contribute to the exceedance of the in-stream criteria. In order to evaluate the need for permit limitations, the permit limits were compared to the Discharge Monitoring Report (DMR) data and the State User Fee Program data. An assessment was made to determine if limits were necessary for any pollutants that had water quality criteria using the data collected during the previous five years. Based on these comparisons, water quality limitations have been deemed necessary for Chlorine, Ammonia, Hexavalent Chromium, Copper, Lead, Mercury, Nickel, Silver, Zinc, and Cyanide. The remainder of the data for the pollutants that were limited or monitored in the previous permit (Cadmium, 1,1,1–Trichloroethane, Trichloroethylene, Tetratchloroethylene, and Dichloromethane)

clearly shows that limits are not required. This determination was made based on the fact that the data was well below levels that would be required in order to meet water quality.
Evaluation of the data collected for biotoxicity revealed that the effluent samples consistently demonstrated acceptable acute toxicity values for the Mysid tests and for the Menidia tests (chronic data was not available). However, dilutions of less than 10 require that chronic toxicity be evaluated. Therefore, the permit requires that one acute and one chronic toxicity test be conducted on the final effluent once per quarter. Based upon the past toxicity results and the available dilution, the draft permit requires an $LC_{50} \geq 100\%$ effluent limit for quarterly acute tests conducted on Mysids. The permit also contains a chronic C-NOEC limit of 50% for quarterly chronic tests conducted on Arbacia. These tests shall assure control of toxicity in the effluent. If toxicity is consistently demonstrated, then toxicity identification and reduction will be required.

A comparison of the DMR and User Fee data with the final permit limitations indicated that the treatment facility is currently unable to attain the final permit limitations for Copper, Cyanide, Mercury, Nickel, and Silver and that interim limits are necessary. The existing Consent Agreement establishes a compliance plan to address how compliance with the final permit limitations will be achieved. This Consent Agreement will be modified to include a compliance schedule for Ammonia.

Although no nutrient limits have been established at this time, a TMDL is currently underway to investigate the source of excessive nutrient levels that are causing low dissolved oxygen (DO) levels and nuisance algae blooms in the Seekonk River, Providence River, and Narragansett Bay. When this information becomes available, it will identify what reductions in the quantity of Nitrogen discharged from the Bucklin Point WWTF will be necessary. Once the TMDL has been completed, nutrient limits will be assigned. Until then, the requirement of testing for nutrients, phosphorus, nitrate, nitrite, and ammonia, is necessary to make a determination on nutrient loadings in the receiving water. This information will aid the Department in decision making on the necessity of nutrient removals from the treatment plant wastewater.

The effluent monitoring requirements have been specified in accordance with RIPDES regulations as well as 40 CFR 122.41 (j), 122.44 (i), and 122.48 to yield data representative of the discharge. The permit requires semi-annual priority pollutant scans on the WWTF's effluent.

The permit contains requirements for the permittee to comply with the State's Sludge Regulations and the WWTF's RIDEM Order of Approval for sludge disposal in accordance with the requirements of Section 405(d) of the Clean Water Act (CWA). Permits must contain sludge conditions requiring compliance with limits, state laws, and applicable regulations as per Section 405(d) of the CWA and 40 CFR 503. The RIDEM Sludge Order of Approval sets forth the conditions to ensure this compliance.

The permit contains a reporting requirement for a local program to regulate industrial discharges to the sewer system (referred to as pretreatment program). This program is being required under authority of Section 402(b)(8) of the CWA and 40 CFR 122.44 (j) and 403.8 because the Town receives significant discharges of industrial wastewater.

From the effective date of this permit, the permittee is authorized to discharge from the CSOs associated with it's WWTF, as listed in this permit, provided that the discharge complies with the EPA and RIDEM CSO Policies and that discharges receive treatment at a level providing Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT) to control and abate conventional pollutants and Best Available Technology Economically Achievable (BAT) to control and abate non-conventional and toxic pollutants.

The Office has determined that all permit limitations are consistent with the Rhode Island Antidegradation policy. Limitations for Chlorine, Hexavalent Chromium, Copper, Lead, Mercury, and Nickel were increased in accordance with the Antidegradation policy, which allows an increased permit limit if it can be assured that water quality standards will be attained. A document, which outlines the permit development in greater detail, is available upon request.

The remaining general and specific conditions of the permit are based on the RIPDES regulations as well as 40 CFR Parts 122 through 125 and consist primarily of management requirements common to all permits.

V. 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 Rhode Island Department of Environmental Management, Office of Water Resources, 235 Promenade Street, Providence, Rhode Island, 02908-5767. In accordance with Chapter 46-17.4 of Rhode Island General Laws, a public hearing will be held prior to the close of the public comment period. In reaching a final decision on the draft permit the Director will respond to all significant comments and make these responses available to the public at DEM's Providence Office.

Following the close of the comment period, and after a public hearing, the Director 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, provided oral testimony, or requested notice. Within thirty (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 Rule 49 of the Regulations for the Rhode Island Pollutant Discharge Elimination System.

VI. DEM Contact

Additional information concerning the permit may be obtained between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday, excluding holidays from:

Joseph B. Haberek, P.E.
Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 222-4700, Ext.: 7715

11/16/01
Date

Eric A. Beck, P.E.
Supervising Sanitary Engineer
RIPDES Program
Office of Water Resources
Department of Environmental Management

ATTACHMENT A-1
PRETREATMENT ANNUAL REPORT SUMMARY

			PPSI	PAU1	PAU2	PAU3
GENERAL INFORMATION:						
Control Authority Name: _____						
Address: _____ City: _____						
State/Zip: _____						
Coordinator Name: _____ Phone: _____		COOR		X		X
RIPDES Permit Number: _____		NPID	X	X	X	X
Reporting Period - Start Date: *Starting date that the summary covers.*	_____	PSSD	X			
Reporting Period - End Date: *Ending date that the summary covers Normally 12 months after start date.*	_____	PSED	X			
Total Number of SIU's *This number includes the number of CIU's.*	_____	SIUS		X		
Total Number of CIU's	_____	CIUS		X		
SIGNIFICANT INDUSTRIAL USER COMPLIANCE STATUS						
Number of CIU's Submitting BMR's/# Required:	____/____					
Number of CIU's Submitting 90-Compliance Reports/# Required:	____/____					
Number of SIU's in Significant Noncompliance with Pretreatment Compliance Schedules/# Required to Meet Schedules: *Over the reporting period, the number of SIU's in SNC because they violated a compliance schedule milestone date by 90 days or more or have violated a compliance schedule reporting date by 30 days or more and have not returned to compliance.*	_____	SSNC	X			
Number of SIU's in SNC with Self-Monitoring Requirements: *Over the reporting period, the number of SIU's in SNC because they failed to accurately report their noncompliance or have failed to provide self-monitoring results within 30 days of the due date and have not returned to compliance with the schedule or reporting.*	_____	MSNC		X		

PRETREATMENT ANNUAL REPORT SUMMARY - Page 2

SIGNIFICANT INDUSTRIAL USER COMPLIANCE STATUS (Con't)		PPS1	PAU1	PAU2	PAU3
Number of SIU's in Significant Noncompliance for Either Violating Effluent Or Reporting Requirements: *At the end of the reporting period, the number of SIU's in SNC for violating an effluent standard (Local Limits, Categorical Standards of General Federal Prohibitions) or for violating a reporting requirement and has NOT had adequate enforcement action taken against them by the POTW.*	_____PSNC		X		
Number of SIU's in SNC with Reporting Requirements: *At the end of the reporting period, the number of SIU's in SNC for violating a reporting requirement.*	_____RSNC			X	
Number of SIU's in SNC with Effluent Requirements: *At the end of the reporting period, the number of SIU's in SNC for violating their effluent standards (Local Limits, Categorical Standards or General Federal Prohibitions).*	_____SNPS				X
COMPLIANCE MONITORING PROGRAM					
Number of SIU's Without Active (Expired) Permits: *At the end of the reporting period, the number of SIU's that have no Industrial Discharge Permit or have an expired permit.*	_____RDN1				X
Number of SIU's With Permits Expired for 180 Days or More: *Over the reporting period, the number of SIU's that did not have an Industrial Discharge Permit for more than 180 days or had an expired permit for more than 180 days.*	_____NOCM		X		
Number of SIU's (Both) not Inspected and Sampled by POTW in the Past 12 Months: *Over the reporting period, the number of SIU's that have not been sampled by the POTW and have not been inspected by the POTW.*	_____NOIN		X		
Number of SIU's not Sampled/Not Inspected by the POTW in the Past 12 Months: *Two part field. First, over the designated reporting period, the number of SIU's that have not been sampled by the POTW. Second, over the designated reporting period, the number of SIU's that have not been inspected by the POTW.*	____/____RDN2				X
Number of SIU's in SNC with Self-Monitoring and Not Inspected and Not Sampled in the Past 12 Months: *Over the reporting period, the number of SIU's that first, meet the criteria of MSNC and second, have not been sampled by the POTW and have also not been inspected by the POTW.*	_____SNIN		X		

PRETREATMENT ANNUAL REPORT SUMMARY - Page 3

ENFORCEMENT ACTIONS		PPS1	PAU1	PAU2	PAU3
Number of Compliance Schedules issued: *Over the designated reporting period, the number of SIU's that were issued a compliance schedule by the POTW.*	SOCS	X			
Number of Notices of Violation Issued to SIU's: *Over the designated reporting period, the number of NOV's issued to SIU's by the POTW.*	VINO	X			
Number of Administrative Orders issued to SIU's: *Over the designated reporting period, the number of AO's issued to SIU's by the POTW.*	ADOR	X			
Combined Total of Administrative Orders and Notices of Violation: *Over the designated reporting period, the number of AO's and NOV's issued to SIU's by the POTW.*	FENF	X			
Civil Suits Filed Against SIU's: *Over the designated reporting period, the number of civil suits filed against SIU's by the POTW.*	CIVL	X			
Criminal Suits Filed Against SIU's: *Over the designated reporting period, the number of criminal suits filed against SIU's by the POTW.*	CRIM	X			
Combined Total of Civil and Criminal Suits: *Over the designated reporting period, the number of civil and criminal suits filed against SIU's by the POTW.*	JUDI	X			
Number of SIU's Published in the Newspaper as Significant Violators: *Over the designated reporting period, the number of SIU's that have been or will be published in the newspaper for being in SNC by the POTW.*	SVPU	X			
Number of SIU's From Which Penalties Were Collected: *Over the designated reporting period, the number of SIU's that the POTW has collected a penalty from.*	IUPN	X			
Total Amount of Penalties Collected: *Over the designated reporting period, the total amount of penalty dollars that has been collected from SIU's by the POTW.*	PAMT	X			
Number of SIU's Subject to Any Enforcement Action: *Over the designated reporting period, the total number of SIU's which have been subject to any type of formal enforcement action by the POTW.*	NENF	X			

ATTACHMENT A-2

DESCRIPTION OF DISCHARGE: Secondary treated domestic and industrial wastewater.
DISCHARGE: 001A - Secondary Treatment Discharge

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE OF SELECTED POLLUTANTS[2]:

PARAMETER		**AVERAGE[1]**
FLOW (MGD)		25.37 MGD
BOD_5 (PPM)		14.97 mg/l
TSS		17.26 mg/l
Fecal Coliform		29.33 MPN/100 ml
pH	6.44 S.U. (Minimum)	7.32 S.U. (Maximum)
Chlorine Residual		19.92 mg/l
Cyanide		8.44 ug/l
Cadmium		0.46 ug/l
Chromium (Total)		18.27 ug/l
Copper		21.06 ug/l
Lead		4.29 ug/l
Mercury		0.31 ug/l
Nickel		35.02 ug/l
Silver		2.53 ug/l
Zinc		51.87 ug/l

[1]Data represents the mean of the monthly average data from January 1996 – June 2001

[2]Additional pollutant information may be found in the Permit Development Document, which is available upon request.

Biotoxicity Data LC_{50} Values (in percent effluent)

	1998 2nd qtr.	**3rd qtr.**	**4th qtr.**	**1999 1st qtr.**	**2nd qtr.**	**3rd qtr.**	**4th qtr.**	**2000 1st qtr.**	**2nd qtr.**
Mysid	100	100	100	>100	>100	>100	>100	>100	>100
Menidia	66	100	100	>100	>100	>100	>100	>100	>100