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 CITY OF NEWPORT & EARTH TECH, INC.
250 CONNELL HIGHWAY
NEWPORT, RI 02840

are authorized to discharge from a facility located at

Newport Water Pollution control Plant (Newport WPCP),
Long Wharf CSO, Washington Street CSO Facility, and
Wellington Avenue Microstraining Facility

to receiving waters named

Narragansett Bay

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

This permit shall become effective on December 1, 2007.

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

This permit supersedes the permit issued on November 10, 1997.

This permit consists of 29 pages in Part I including effluent limitations, monitoring requirements, etc. and 10 pages in Part II including General Conditions.

Signed this 28th day of September, 2007.

Angelo S. Liberti

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 001A (Newport WPCP effluent 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	10.7 MGD	19.7 MGD				Continuous	Recorder
BOD_5[1]	2;677 lbs/day	4,462 lbs/day	30 mg/L	45 mg/L	50 mg/L	3/Week	24-Hr. Comp.
BOD_5 - % Removal			85%			1/Month	Calculated
TSS[1]	2,677 lbs/day	4,462 lbs/day	30 mg/L	45 mg/L	50 mg/L	3/Week	24-Hr. Comp.
TSS - % Removal			85%			1/Month	Calculated
Oil and Grease[1]					--- mg/L	1/Month	3 Grabs[2]

[1]Testing for BOD_5, TSS, and Oil and Grease shall be performed and reported for influent and effluent with appropriate allowances for hydraulic detention (flow-through) time.

[2]The 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.

Sampling for TSS shall be performed on Tuesday, Thursday, and either Saturday or Sunday. Two (2) of the BOD_5 samples shall be taken at the same time as two (2) of the TSS samples. Sampling for Flow shall be performed Sunday – Saturday.

--- 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 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 001A (Newport WPCP effluent 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/Week	Grab
Total Residual Chlorine (TRC)			590 µg/L[2]		860 µg/L[2]	3/Day	Grab
pH			(6.0 SU)		(9.0 SU)	2/Day	Grab
Settleable Solids				--- mL/L	--- mL/L	1/Day	Grab

[1]All of the Fecal Coliform samples shall be collected at the same time as the second TRC sample. Two (2) of the three (3) samples shall be taken on Tuesday and Thursday. The Geometric Mean shall be used to obtain the "weekly average" and the "monthly average."

[2] 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 a minimum of three (3) grab samples, equally spaced over a day with a minimum of three (3) hours between grabs, Monday – Friday (except holidays), and on Saturdays, Sundays, and Holidays by taking at least (2) grab samples each day with a minimum of two (2) 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) DPD Spectrophotometric, EPA No. 330.5 or Standard Methods (18th Edition) No. 4500-Cl G; (2) DPD Titrimetric, EPA No. 330.4 or Standard Methods (18th Edition) No. 4500-Cl F; (3) Amperometric Titration, EPA No. 330.1 or Standard Methods (18th Edition) No. 4500-Cl D or ASTM No. D1253-86(92); (4) Iodometric Direct Titration, EPA No. 330.3 or Standard Methods (18th Edition) No. 4500-Cl B; (5) Iodometric Back Titration (either end-point), EPA No. 330.2 or Standard Methods (18th Edition) No. 4500-Cl C.

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

*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 Settleable solids, pH and TRC 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 I

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 001A (Newport WPCP effluent 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	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
TKN (May 1 – October 31)					--- mg/L	1/Month	24-Hr. Comp.
Nitrate, Total (as N) (May 1 – October 31)					--- mg/L	1/Month	24-Hr. Comp.
Nitrite, Total (as N) (May 1 – October 31)					--- mg/L	1/Month	24-Hr. Comp.
Nitrogen, Total (TKN + Nitrate + Nitrite, as N) (May 1 – October 31)					--- mg/L	1/Month	Calculated

---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.

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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 001A (Newport WPCP effluent 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	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Mysidopsis bahia LC_{50}[1]			100% or Greater[2]			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 which is composed of 100% effluent.

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

PART I

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 002C (Long Wharf/Washington Street combined flows). 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	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
BOD_5 - % Removal[1]					35%	2 Overflows/Month[2]	Calculated
TSS - % Removal[1]					50%	2 Overflows/Month[2]	Calculated
Settleable Solids - % Removal[1]					---%	2 Overflows/Month[2]	Calculated

[1]Percent removal shall be computed using the formula in Part I.B.2 of the permit.

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

[2]For monitoring purposes, an overflow is defined as any occurrence of a discharge from a CSO to the receiving water with a minimum duration of 15 minutes. Overflows shall be considered to be separate if they are separated by six (6) or more hours. During months of no overflow DMRs shall be marked as "no discharge." All flows created by the greater than the one (1)-year six (6)-hour storm (depth = 1.95 inches), and all storms occurring less frequently as defined by Figure 5, are not subject to these limitations. Dry weather overflows are prohibited. Any discharge from a CSO to the receiving water, regardless of the duration, must be reported as a CSO to the DEM's Operations and Maintenance Program.

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

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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 010A (Washington Street CSO Facility). 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	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow (Volume)		--- MG				Continuous[2]	Recorder
BOD_5					--- mg/L	2 Overflows/Month[2]	Composite[1]
TSS					--- mg/L	2 Overflows/Month[2]	Composite[1]
Fecal Coliform					--- MPN/100 mL	2 Overflows/Month[2]	Grab
Total Residual Chlorine					--- mg/L	2 Overflows/Month[2]	Grab
Oil and Grease					--- mg/L	2 Overflows/Month[2]	Grab
Settleable Solids					--- ml/L	2 Overflows/Month[2]	Grab

[1]Composite sampling shall consist of 15-minute grabs taken during the first 24 hours of each overflow, or for the length of the overflow if the duration is less than 24 hours.

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

[2]For monitoring purposes, an overflow is defined as any occurrence of a discharge from a CSO to the receiving water with a minimum duration of 15 minutes. Overflows shall be considered to be separate if they are separated by six (6) or more hours. During months of no overflow DMRs shall be marked as "no discharge." All flows created by the greater than the one (1)-year six (6)-hour storm (depth = 1.95 inches), and all storms occurring less frequently as defined by Figure 5, are not subject to these limitations. Dry weather overflows are prohibited. Any discharge from a CSO to the receiving water, regardless of the duration, must be reported as a CSO to the DEM's Operations and Maintenance Program.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: Outfall 010A.

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A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

7. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number 003A (Long Wharf CSO). 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	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow (Volume)		--- MG				Continuous[2]	Recorder
BOD_5					--- mg/L	2 Overflows/Month[2]	Composite[1]
TSS					--- mg/L	2 Overflows/Month[2]	Composite[1]
Fecal Coliform					--- MPN / 100 mL	2 Overflows/Month[2]	Grab
Total Residual Chlorine					--- mg/L	2 Overflows/Month[2]	Grab
Oil and Grease					--- mg/L	2 Overflows/Month[2]	Grab
Settleable Solids					--- ml/L	2 Overflows/Month[2]	Grab

[1]Composite sampling shall consist of 15-minute grabs taken during the first 24 hours of each overflow, or for the length of the overflow if the duration is less than 24 hours.

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

[2]For monitoring purposes, an overflow is defined as any occurrence of a discharge from a CSO to the receiving water with a minimum duration of 15 minutes. Overflows shall be considered to be separate if they are separated by six (6) or more hours. During months of no overflow DMRs shall be marked as "no discharge." All flows created by the greater than the one (1)-year six (6)-hour storm (depth = 1.95 inches), and all storms occurring less frequently as defined by Figure 5, are not subject to these limitations. Dry weather overflows are prohibited. Any discharge from a CSO to the receiving water, regardless of the duration, must be reported as a CSO to the DEM's Operations and Maintenance Program.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: Outfall 003A.

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A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

8. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number 007A (Wellington Avenue Microstraining Facility). 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	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow[1] (Volume)		--- MG				Continuous[3]	Recorder
BOD_5[1]					--- mg/L	2 Overflows/Month[3]	Composite[2]
BOD_5 - % Removal					35%	2 Overflows/Month[3]	Calculated
TSS[1]					--- mg/L	2 Overflows/Month[3]	Composite[2]
TSS - % Removal					50%	2 Overflows/Month[3]	Calculated

[1]Testing for Flow, BOD_5, and TSS shall be performed and reported for influent and effluent with appropriate allowances for hydraulic detention (flow-through) time.

[2]Composite sampling shall consist of flow-composited grabs taken during the first 24 hours of each overflow, or for the length of the overflow if the duration is less than 24 hours.

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

[3]For monitoring purposes, an overflow is defined as any occurrence of a discharge from a CSO to the receiving water with a minimum duration of 15 minutes. Overflows shall be considered to be separate if they are separated by six (6) or more hours. During months of no overflow DMRs shall be marked as "no discharge." All flows created by the greater than the one (1)-year six (6)-hour storm (depth = 1.95 inches), and all storms occurring less frequently as defined by Figure 5, are not subject to these limitations. Dry weather overflows are prohibited. Any discharge from a CSO to the receiving water, regardless of the duration, must be reported as a CSO to the DEM's Operations and Maintenance Program.

Sampling will be excused during adverse weather conditions. Adverse weather conditions will include conditions where it is the professional opinion of the operator on duty that his presence on the pier would constitute a significant threat to personal safety. This would include conditions such as heavy winds, diminished visibility due to driving rain or snow, icy or slippery conditions, and the presence of seawater due to wave excursions.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: Outfall 007A.

PART I

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

9. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number 007A (Wellington Avenue Microstraining Facility). 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	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Fecal Coliform[1]					--- MPN / 100 mL	2 Overflows/Month[2]	Grab
Total Residual Chlorine					--- mg/L	2 Overflows/Month[2]	Grab
Oil and Grease[1]					--- mg/L	2 Overflows/Month[2]	Grab
Settleable Solids[1]					--- ml/l	2 Overflows/Month[2]	Grab
Settleable Solids - % Removal					---%	2 Overflows/Month[2]	Calculated

[1]Testing for Fecal Coliform, Settleable Solids, and Oil and Grease shall be performed and reported for influent and effluent with appropriate allowances for hydraulic detention (flow-through) time.

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

[2]For monitoring purposes, an overflow is defined as any occurrence of a discharge from a CSO to the receiving water with a minimum duration of 15 minutes. Overflows shall be considered to be separate if they are separated by six (6) or more hours. During months of no overflow DMRs shall be marked as "no discharge." All flows created by the greater than the one (1)-year six (6)-hour storm (depth = 1.95 inches), and all storms occurring less frequently as defined by Figure 5, are not subject to these limitations. Dry weather overflows are prohibited. Any discharge from a CSO to the receiving water, regardless of the duration, must be reported as a CSO to the DEM's Operations and Maintenance Program.

Sampling will be excused during adverse weather conditions. Adverse weather conditions will include conditions where it is the professional opinion of the operator on duty that his presence on the pier would constitute a significant threat to personal safety. This would include conditions such as heavy winds, diminished visibility due to driving rain or snow, icy or slippery conditions, and the presence of seawater due to wave excursions.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: Outfall 007A.

10. 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 (Outfall 001A) 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. The permittee shall analyze its effluent annually from Outfall 001A 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 for the previous calendar 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.

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

B. COMBINED SEWER OVERFLOW REQUIREMENTS

1. During wet weather, the permittee is authorized to discharge from the following combined sewer overflows (CSOs) in accordance with Part I.A.6. through Part I.A.9. of the permit: the Long Wharf CSO (Outfall 003A), the Washington Street CSO Facility (Outfall 010A) and the Wellington Avenue Microstraining Facility (Outfall 007A). These CSOs are subject to the following:

a. The discharges shall comply with the EPA and RIDEM CSO Policies, including those not specifically listed in this permit.

b. 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.B.1.d. "Nine Minimum Controls, Minimum Implementation Levels" of this permit.:

1. The permittee shall maintain and implement Standard Operating Procedures and proper operation and maintenance programs for the sewer system and all CSO outfalls to reduce the magnitude, frequency, and duration of CSOs. The program shall consider regular sewer inspections; sewer, catch basin, and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; disconnection of illegal connections, and the items in Parts I.E.3 and I.B.1.d.5. of this permit.

2. The permittee shall maintain and implement Standard Operating Procedures that will maximize use of the collection system for wastewater storage that can be accommodated by the storage capacity of the collection system in order to reduce the magnitude, frequency, and duration of CSOs.

3. The permittee shall evaluate the CSO impacts from non-domestic users and take appropriate steps to minimize such impacts.

4. The permittee shall develop and implement Standard Operating Procedures to operate the POTW treatment plant at maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency, and duration of CSOs. The permittee shall deliver all flows to the treatment plant within the constraints of the treatment capacity of the POTW.

5. Dry weather overflows from CSO outfalls are prohibited. Each dry weather overflow must be reported to the permitting authority as soon as the permittee becomes aware of the overflow. When the permittee detects a dry weather overflow, the permittee shall begin corrective action immediately. 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). The permittee shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated.

6. The permittee shall implement measures to control solid and floatable materials in CSOs.

7. The permittee shall implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters.

8. The permittee shall implement a public notification process to inform citizens of when and where CSOs occur. The process must include: (a) a mechanism to alert persons of the occurrence of CSOs and; (b) a system to determine the nature and duration of conditions that are potentially harmful for users of receiving waters due to CSOs. The City of Newport and Earth Tech shall maintain CSO identification signs at each CSO in the Newport WPCP Service Area. The signs must be located at or near the outfall structures, easily readable by the public, a minimum of 12 by 18 inches in size with white lettering against a green background, and shall contain the following information:

   The City of Newport
   Wet Weather Combined Sewage Discharge
   Outfall Number _____
   (discharge serial number)

   The signs must comply with the minimum requirements as approved by RIDEM.

9. The permittee shall monitor CSO outfalls to characterize CSO impacts and the efficacy of CSO controls. This shall include collection of data that will be used to document the existing baseline conditions, evaluate the efficacy of the technology-based controls, and determine the baseline conditions upon which the long-term control plan will be based. These data shall include:

   a. Characteristics of the combined sewer system including the population served by the combined portion of the system and locations of all CSO outfalls in the CSS;

   b. Total number of CSO events and the frequency and duration of CSOs for a representative number of events;

   c. Locations and designated uses of receiving waterbodies;

d. Water quality data for receiving waterbodies;

e. Water quality impacts directly related to CSOs (e.g., beach closing, floatable wash-up episodes, fish kills).

c. Within ninety (90) days of the effective date of this permit, the permittee shall submit an updated Nine Minimum Controls Plan for RIDEM review and approval that displays the status of the implementation of each minimum control shown in Parts I.B.1.b.1. – 9. of the permit.

1. The City shall maintain and implement the approved Nine Minimum Controls Plan.

2. If the Nine Minimum Controls Plan is reviewed by the RIDEM the permittee may be notified at any time that the Plan does not meet one or more of the minimum requirements of Parts I.B.1.b.1. – 9. of this permit. After such notification from the RIDEM, the permittee shall make changes to the Plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided by the RIDEM, the permittee shall have thirty (30) days after such notification to make the necessary changes.

d. Nine Minimum Controls, Minimum Implementation Levels:

1. The permittee must implement the nine minimum controls in accordance with the documentation provided to 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.

2. 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 that minimize the likelihood of concentrated wastes being discharged from CSOs.

3. 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).

4. The City of Newport shall maintain CSO identification signs at each CSO in the Newport WPCP Service Area. The signs must comply with the minimum requirement as approved by RIDEM.

5. Operation and maintenance of the sewer system:

   a. All catch basins owned by the permittee shall be inspected, and cleaned if required, a minimum of once per year.

   b. 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.

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

   d. All tidegates (if applicable) shall be inspected and maintained on a monthly basis.

e. All sumps in the Newport WPCP Service Area associated with CSO regulators shall be cleaned quarterly.

f. A report on tidegate and combined sewer overflow/regulator maintenance/repair and Nine Minimum Controls Plan implementation status 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, the anticipated repair schedule, and a summary of any activities related to the Nine Minimum Controls Plan. The first report is due July 15, 2008.

2. The Long Wharf/Washington Street combined flows (Outfall 002C) shall be allowed to include flows of combined sewage pumped to the Newport WPCP and receiving secondary treatment when calculating percent removal data. Likewise, all other flows (untreated CSO flows and primary treated CSO discharges) are accounted for in the calculations of percent removal data. The combined sewage entering the Long Wharf/Washington Street Facility designated as Outfall 002C would either: (1) receive primary treatment and disinfection and discharge through Outfall 010A; (2) be stored and pumped back to Newport's WPCP to receive secondary treatment, via the Long Wharf Pumping Station; or (3) discharged with disinfection from Long Wharf CSO (Outfall 003A). Compliance with the CSO Policy for Outfall 002C would be evaluated using the following formula:

Monthly % Removal = For CSO Facility

$$\frac{\sum_{i=1}^{n}\left[\frac{(V_1C_1)-[(V_2C_2)+V_3C_3(1-R)]}{V_1C_1+V_4C_4}\right]_i}{n}$$

Where: i = each storm event which activates CSO facility;

n = the number of storm events that CSO facility is activated in a month;

V_1 = volume of flow that enters the Washington Street CSO Facility (prior to screening);

C_1 = concentration of pollutants that enters the Washington Street CSO Facility (prior to screening);

V_2 = volume of flow that is treated and discharged from the Washington Street CSO Facility (Outfall 010A);

C_2 = concentration of pollutants that is treated and discharged from Washington Street CSO Facility (Outfall 010A);

V_3 = volume of flow that is pumped back to the Newport WPCP (including stored flows pumped after storm);

C_3 = concentration of pollutants that is pumped back to the Newport WPCP (based on flow proportioned composite samples taken during the pumpback cycle);

R = monthly percent removal from Newport WPCP;

V_4 = volume of flow that is treated and discharged from the Long Wharf CSO (Outfall 003A);

C_4 = concentration of pollutants that is treated and discharged from the Long Wharf CSO (Outfall 003A) as determined by the sampling required in Part I.A.7 of this permit.

Note: The numbering used in Figure 3 corresponds to the subscripts above.

The above formula is not applicable for the Wellington Avenue Microstraining Facility since flows of combined sewage pumped to the Newport WPCP, untreated effluent, and primary treated CSO discharges cannot be quantified during wet weather events. A simplified percent removal calculation based upon influent and effluent data shall be used for the Wellington Avenue Microstraining Facility.

C. BIOMONITORING REQUIREMENTS AND INTERPRETATION OF RESULTS

1. General

Beginning on the effective date of the permit, the permittee shall perform four (4) acute toxicity tests per year on samples collected from discharge Outfall 001A. The permittee shall conduct the tests during dry weather periods (no rain forty-eight (48) hours prior to or during sampling unless approved by RIDEM) according to the following test frequency and protocols. Acute data shall be reported as outlined in Part I.C.9. 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 (4) sampling events, (one (1) each calendar quarter) the permittee will conduct forty-eight (48) hour acute definitive toxicity tests on the species listed below, for a total of four (4) acute toxicity tests per year. This requirement entails performing one-species testing as follows:

Species	Test Type	Frequency
	One Species Test	(Four Times Annually)
Mysids (Mysidopsis bahia)	Definitive 48-Hour Acute Static (LC_{50})	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 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 period (no rain forty-eight (48) hours prior to or during sampling unless approved by RIDEM). This sample shall be kept cool (at 4°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°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 acute 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 Part I.C.7.). 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 personal safety on this dock. The permittee shall observe 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)

a. Test type	48-Hour Static Acute Definitive
b. Salinity	25 ppt ± 10% for all dilutions
c. Temperature	25° ± 1°C
d. Light Quality	Ambient laboratory illumination
e. Photoperiod	8 –16 Hour Light/24-Hour
f. Test Chamber Size	250 ml
g. Test solution volume	200 ml

h.	Age of Test Organisms	1 – 5 Days
i.	Number of Mysids Per Test Chamber	10
j.	Number of Replicate Test Chamber Per Concentration	2
k.	Total Number Mysids Per Test Concentration	20
l.	Feeding Regime	Light feeding (two (2) drops concentrated brine shrimp nauplii, approximately 100 nauplii per mysid twice daily)
m.	Aeration	None, unless dissolved oxygen concentration falls below 40% of saturation at which time gentle single-bubble aeration should be started.
n.	Dilution Water	Narragansett Bay water as discussed above.
o.	Dilutions	Five (5) dilutions plus a control: 100%, 50%, 25%, 12.5%, 6.25% and 0% effluent.
p.	Effect Measured and Test	Mortality – no movement of body test duration or appendages on gentle prodding, 48-hour LC_{50} and NOAEL.
q.	Test Acceptability	90% or greater survival of test organisms in control solution.
r.	Sampling Requirements	Samples are collected and used within 24 hours after the last sample of the composite is collected.
s.	Sample Volume Required	Minimum four (4) liters

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

8. Chemical Analysis

The following chemical analysis shall be performed for every 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)

The above analyses may be used to fulfill, in part or in whole, monthly monitoring requirements in the permit.

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 the User Fee Program and/or other permit conditions to fulfill any priority pollutant scan requirements.

9. 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.
- Raw data and bench sheets.
- Any other observations or test conditions affecting test outcome.

Toxicity Test data shall include the following:

- 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.

10. 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, a Letter of Agreement shall 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, Office of Water Resources.

11. 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 fourth quarter (October 1 – December 31) of 2007, and the first report shall be submitted to RIDEM no later than January 15, 2008.

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

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

D. 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.

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

a. 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.

b. At the time of renewal of this permit and in accordance with 40 CFR 122.21(j)(4) as revised July 24, 1990, the permittee shall submit to the DEM with its permit renewal application a written technical evaluation of the need to revise local limits. The evaluation shall be based, at a minimum, on information obtained during the implementation of the permittee's local limits monitoring plan and procedures, and current RIPDES permit discharge limits, sludge disposal criteria, secondary treatment inhibition, and worker health and safety criteria.

4. Enforcement Response Plan (ERP)

The permittee has submitted to the DEM a draft revised Enforcement Response Plan (ERP) intended to meet the requirements of 40 CFR 403.8(f)(5). Upon review, the DEM will provide written notification either granting preliminary approval of the ERP or stating the deficiencies revealed therein. The DEM's written notification will include a determination whether the ERP constitutes a substantial or non-substantial program modification as defined by 40 CFR 403.18, and as specified in Part I.D.5.e of this permit. No longer than thirty (30) days following the final approval of the ERP, the permittee shall commence implementation of the ERP.

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 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.D.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 of 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. 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 ninety (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. <u>Categorical Industrial Users (CIUs)</u>

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(l) 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 February 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, including dates, 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 list of the Compliance status of each Industrial User (IU), as of the end of last quarter covered by the annual report. The list shall identify all IUs in non-compliance, the pretreatment program requirement which the IU failed to meet, and the type, and date of the enforcement action initiated by the permittee in response to the violation. If applicable, the list shall also contain the date which IUs in non-compliance returned to compliance, a description of corrective actions ordered, and the penalties levied.

d. A list of industries which were determined, in accordance with Part I.D.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 user sampled by the POTW (include sampling dates and dates of analysis, 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, issuance date of new permit, and a brief description of any changes to the 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.D. of this permit and any additional sampling data available to the permittee; and

m. A completed pretreatment annual report summary (PARS) form (Attachment A-1 contains a copy of the PARS form; this form MUST be used).

8. Interjurisdictional Agreements

By September 21, 2007, the permittee shall submit to the DEM, an attorney's statement by the City Solicitor or a public official acting in a comparable capacity, and a revised/updated Inter-jurisdictional agreement between the City of Newport and the Town of Middletown. The attorney statement shall evaluate the adequacy of the agreement in terms of, but not limited to, legal authority provided for: the consistency of the Middletown Sewer Use Ordinance and adopted local limits with respect to those of Newport; enforcement actions by Newport for violations of the Newport Pretreatment Program in Middletown; permitting, inspecting, and sampling of Industrial Users located in Middletown; Newport's right to enter facilities located in Middletown; Newport's authority to access all records compiled by the contributing jurisdiction in relation to pretreatment program activities; and remedies for breach of contract. In addition, the statement must evaluate the present status of the implementation of the agreement by Middletown. The statement must also evaluate whether a separate Inter-jurisdictional Agreement or contract is required with the industry Raytheon that contributes hauled wastewater and that is located in the Town of Portsmouth.

If an Inter-jurisdictional agreement or contract with Raytheon is determined to be necessary, the statement shall contain a proposed agreement/contract that provides adequate legal authority. If applicable, a proposed compliance schedule shall also be submitted with the statement for implementing requirements of the agreement/contract with Newport that have yet to be fulfilled. Upon approval of the DEM, the proposed agreement and compliance schedule shall be adopted within 90 days.

9. Sewer Use Ordinance

The permittee has an approved Sewer Use Ordinance which shall continue to be implemented at all times.

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. 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.

3. 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 two-(2) calendar years shall be submitted to RIDEM, Office of Water Resources, by the 15th day of January every other year. The first report is due January 15, 2008.

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 Pertaining to the 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	5.0 - EPA Method 200.7
Chromium, Hexavalent***	20.0 - Standard Methods 18th Ed., 3500-CR.D.
Copper, Total	20.0 - EPA Method 200.7
Lead, Total	3.0 - EPA Method 200.9
Mercury, Total	0.5 - EPA Method 245.1
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. A copy of the analytical laboratory report, specifying analytical methods used, shall be included with each report submission. The first report is due on January 15, 2008. Signed copies of these, and all other reports required herein, shall be submitted to:

Annie McFarland
Electronic Computer Operator
Office of Water Resources
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908

ATTACHMENT A

Calculation of Allowable Acute and Chronic Discharge Limitations Based on Saltwater Aquatic Life Criteria and Human Health Criteria

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS
FACILITY SPECIFIC DATA INPUT SHEET

NOTE: LIMITS BASED ON RI WATER QUALITY CRITERIA DATED JULY 2006

FACILITY NAME: **Newport WPCP**

RIPDES PERMIT #: **RI0100293**

	DISSOLVED BACKGROUND DATA (ug/L)	ACUTE METAL TRANSLATOR	CHRONIC METAL TRANSLATOR
ALUMINUM	NA	NA	NA
ARSENIC	NA	1	1
CADMIUM	0.0351	0.994	0.994
CHROMIUM III	NA	NA	NA
CHROMIUM VI	0.1873	0.993	0.993
COPPER	0.6629	0.83	0.83
LEAD	0.046	0.951	0.951
MERCURY	NA	0.85	NA
NICKEL	1.1598	0.99	0.99
SELENIUM	NA	0.998	0.998
SILVER	0.0048	0.85	0.85
ZINC	NA	0.946	0.946

USE NA WHEN NO DATA IS AVAILABLE

NOTE 1: BACKGROUND DATA BASED ON AVERAGE CONCENTRATIONS OBTAINED FROM THE FOUR SINBADD CRUISES IN CURRENT REPORT #: NBP-89-22 (LOCATIONS B7, B8, B9, B13, B14, B15, & B16).

NOTE 2: METAL TRANSLATORS FROM RI WATER QUALITY REGS.

DILUTION FACTORS	
ACUTE =	66 x
CHRONIC =	78 x
HUMAN HEALTH =	78 x

NOTE: NEWPORT WPCP'S DILUTION FACTORS OBTAINED FROM A CORMIX2 DILUTION EVALUATION.

TOTAL AMMONIA CRITERIA (ug/L)		
WINTER	ACUTE =	21000
	CHRONIC =	3100
SUMMER	ACUTE =	7300
	CHRONIC =	1100

NOTE 1: LIMITS ARE FROM TABLE 3 IN THE RI WATER QUALITY REGS. USING:
SALINITY = 30 g/Kg; pH = 8.0 s.u.
WINTER (NOV-APRIL) TEMP=5.0 C;
SUMMER (MAY-OCT) TEMP=20.0 C.

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Newport WPCP RIPDES PERMIT #: RI0100099

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS:							
TOXIC METALS AND CYANIDE							
ANTIMONY	7440360			No Criteria		640	.39936
ARSENIC (limits are total recoverable)	7440382	NA	69	3643.2	36	1.4	87.36
ASBESTOS	1332214			No Criteria			No Criteria
BERYLLIUM	7440417			No Criteria			No Criteria
CADMIUM (limits are total recoverable)	7440439	0.0351	40	2388.046781	8.8		618.769915
CHROMIUM III (limits are total recoverable)	16065831	NA		No Criteria			No Criteria
CHROMIUM VI (limits are total recoverable)	18540299	0.1873	1100	65788.34391	50		3520.219436
COPPER (limits are total recoverable)	7440508	0.6629	4.8	291.6042169	3.1		200.6948193
CYANIDE	57125		1	52.80	1	140	62.4
LEAD (limits are total recoverable)	7439921	0.046	210	13113.57518	8.1		594.1934805
MERCURY (limits are total recoverable)	7439976	NA	1.8	111.8117647	0.94	0.15	9.36
NICKEL (limits are total recoverable)	7440020	1.1598	74	4363.851515	8.2	4600	491.2478788
SELENIUM (limits are total recoverable)	7782492	NA	290	15342.68537	71	4200	4439.278557
SILVER (limits are total recoverable)	7440224	0.0048	1.9	132.4094118			No Criteria
THALLIUM	7440280			No Criteria		0.47	29.328
ZINC (limits are total recoverable)	7440666	NA	90	5023.255814	81	26000	5342.917548
VOLATILE ORGANIC COMPOUNDS							
ACROLEIN	107028			No Criteria		290	18096
ACRYLONITRILE	107131			No Criteria		2.5	156
BENZENE	71432			No Criteria		510	31824
BROMOFORM	75252			No Criteria		1400	87360
CARBON TETRACHLORIDE	56235			No Criteria		16	998.4
CHLOROBENZENE	108907			No Criteria		1600	99840
CHLORODIBROMOMETHANE	124481			No Criteria		130	8112
CHLOROFORM	67663			No Criteria		4700	293280
DICHLOROBROMOMETHANE	75274			No Criteria		170	10608
1,2DICHLOROETHANE	107062			No Criteria		370	23088
1,1DICHLOROETHYLENE	75354			No Criteria		7100	443040
1,2DICHLOROPROPANE	78875			No Criteria		150	9360
1,3DICHLOROPROPYLENE	542756			No Criteria		21	1310.4
ETHYLBENZENE	100414			No Criteria		2100	131040
BROMOMETHANE (methyl bromide)	74839			No Criteria		1500	93600
CHLOROMETHANE (methyl chloride)	74873			No Criteria			No Criteria
METHYLENE CHLORIDE	75092			No Criteria		5900	368160

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Newport WPCP RIPDES PERMIT #: RI0100293

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,1,2,2TETRACHLOROETHANE	79345			No Criteria		40	2496
TETRACHLOROETHYLENE	127184			No Criteria		33	2059.2
TOLUENE	108883			No Criteria		15000	936000
1,2TRANSDICHLOROETHYLENE	156605			No Criteria		10000	624000
1,1,1TRICHLOROETHANE	71556			No Criteria			No Criteria
1,1,2TRICHLOROETHANE	79005			No Criteria		160	9984
TRICHLOROETHYLENE	79016			No Criteria		300	18720
VINYL CHLORIDE	75014			No Criteria		2.4	149.76
ACID ORGANIC COMPOUNDS							
2CHLOROPHENOL	95578			No Criteria		150	9360
2,4DICHLOROPHENOL	120832			No Criteria		290	18096
2,4DIMETHYLPHENOL	105679			No Criteria		850	53040
4,6DINITRO2METHYL PHENOL	534521			No Criteria		280	17472
2,4DINITROPHENOL	51285			No Criteria		5300	330720
4NITROPHENOL	88755			No Criteria			No Criteria
PENTACHLOROPHENOL	87865		13	686.4	7.9	30	492.96
PHENOL	108952			No Criteria		1700000	106080000
2,4,6TRICHLOROPHENOL	88062			No Criteria		24	1497.6
BASE NEUTRAL COMPUNDS							
ACENAPHTHENE	83329			No Criteria		990	61776
ANTHRACENE	120127			No Criteria		40000	2496000
BENZIDINE	92875			No Criteria		0.002	0.1248
POLYCYCLIC AROMATIC HYDROCARBONS				No Criteria		0.18	11.232
BIS(2CHLOROETHYL)ETHER	111444			No Criteria		5.3	330.72
BIS(2CHLOROISOPROPYL)ETHER	108601			No Criteria		65000	4056000
BIS(2ETHYLHEXYL)PHTHALATE	117817			No Criteria		22	1372.8
BUTYL BENZYL PHTHALATE	85687			No Criteria		1900	118560
2CHLORONAPHTHALENE	91587			No Criteria		1600	99840
1,2DICHLOROBENZENE	95501			No Criteria		1300	81120
1,3DICHLOROBENZENE	541731			No Criteria		960	59904
1,4DICHLOROBENZENE	106467			No Criteria		190	11856
3,3DICHLOROBENZIDENE	91941			No Criteria		0.28	17.472
DIETHYL PHTHALATE	84662			No Criteria		44000	2745600
DIMETHYL PHTHALATE	131113			No Criteria		1100000	68640000
DInBUTYL PHTHALATE	84742			No Criteria		4500	280800
2,4DINITROTOLUENE	121142			No Criteria		34	2121.6

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Newport WPCP RIPDES PERMIT #: RI0100293

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,2DIPHENYLHYDRAZINE	122667			No Criteria		2	124.8
FLUORANTHENE	206440			No Criteria		140	8736
FLUORENE	86737			No Criteria		5300	330720
HEXACHLOROBENZENE	118741			No Criteria		0.0029	0.18096
HEXACHLOROBUTADIENE	87683			No Criteria		180	11232
HEXACHLOROCYCLOPENTADIENE	77474			No Criteria		1100	68640
HEXACHLOROETHANE	67721			No Criteria		33	2059.2
ISOPHORONE	78591			No Criteria		9600	599040
NAPHTHALENE	91203			No Criteria			No Criteria
NITROBENZENE	98953			No Criteria		690	43056
NNITROSODIMETHYLAMINE	62759			No Criteria		30	1872
NNITROSODINPROPYLAMINE	621647			No Criteria		5.1	318.24
NNITROSODIPHENYLAMINE	86306			No Criteria		60	3744
PYRENE	129000			No Criteria		4000	249600
1,2,4trichlorobenzene	120821			No Criteria		70	4368
PESTICIDES/PCBs							
ALDRIN	309002		1.3	68.64		0.0005	0.0312
Alpha BHC	319846			No Criteria		0.049	3.0576
Beta BHC	319857			No Criteria		0.17	10.608
Gamma BHC (Lindane)	58899		0.16	8.448		1.8	112.32
CHLORDANE	57749		0.09	4.752	0.004	0.0081	0.2496
4,4DDT	50293		0.13	6.864	0.001	0.0022	0.0624
4,4DDE	72559			No Criteria		0.0022	0.13728
4,4DDD	72548			No Criteria		0.0031	0.19344
DIELDRIN	60571		0.71	37.488	0.0019	0.00054	0.033696
ENDOSULFAN (alpha)	959988		0.034	1.7952	0.0087	89	0.54288
ENDOSULFAN (beta)	33213659		0.034	1.7952	0.0087	89	0.54288
ENDOSULFAN (sulfate)	1031078			No Criteria		89	5553.6
ENDRIN	72208		0.037	1.9536	0.0023	0.06	0.14352
ENDRIN ALDEHYDE	7421934			No Criteria		0.3	18.72
HEPTACHLOR	76448		0.053	2.7984	0.0036	0.00079	0.049296
HEPTACHLOR EPOXIDE	1024573		0.053	2.7984	0.0036	0.00039	0.024336
POLYCHLORINATED BIPHENYLS3	1336363			No Criteria	0.03	0.00064	0.039936
2,3,7,8TCDD (Dioxin)	1746016			No Criteria		0.000000051	3.1824E-06
TOXAPHENE	8001352		0.21	11.088	0.0002	0.0028	0.01248
TRIBUTYLTIN			0.42	22.176	0.0074		0.46176

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Newport WPCP RIPDES PERMIT #: RI0100293

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS: OTHER SUBSTANCES							
ALUMINUM (limits are total recoverable)	7429905	NA		No Criteria			No Criteria
AMMONIA as N (winter/summer)	7664417		17262 | 6000.6	911434 316832	2548 | 904.2		159008 | 56422.1
4BROMOPHENYL PHENYL ETHER				No Criteria			No Criteria
CHLORIDE	16887006			No Criteria			No Criteria
CHLORINE	7782505		13	858	7.5		585
4CHLORO2METHYLPHENOL				No Criteria			No Criteria
1CHLORONAPHTHALENE				No Criteria			No Criteria
4CHLOROPHENOL	106489			No Criteria			No Criteria
2,4DICHLORO6METHYLPHENOL				No Criteria			No Criteria
1,1DICHLOROPROPANE				No Criteria			No Criteria
1,3DICHLOROPROPANE	142289			No Criteria			No Criteria
2,3DINITROTOLUENE				No Criteria			No Criteria
2,4DINITRO6METHYL PHENOL				No Criteria			No Criteria
IRON	7439896			No Criteria			No Criteria
pentachlorobenzene	608935			No Criteria			No Criteria
PENTACHLOROETHANE				No Criteria			No Criteria
1,2,3,5tetrachlorobenzene				No Criteria			No Criteria
1,1,1,2TETRACHLOROETHANE	630206			No Criteria			No Criteria
2,3,4,6TETRACHLOROPHENOL	58902			No Criteria			No Criteria
2,3,5,6TETRACHLOROPHENOL				No Criteria			No Criteria
2,4,5TRICHLOROPHENOL	95954			No Criteria			No Criteria
2,4,6TRINITROPHENOL	88062			No Criteria			No Criteria
XYLENE	1330207			No Criteria			No Criteria

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Newport WPCP RIPDES PERMIT #: RI0100293

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS:			
TOXIC METALS AND CYANIDE			
ANTIMONY	7440360	No Criteria	39936.00
ARSENIC, TOTAL	7440382	3643.20	87.36
ASBESTOS	1332214	No Criteria	0.00
BERYLLIUM	7440417	No Criteria	0.00
CADMIUM, TOTAL	7440439	2388.05	618.77
CHROMIUM III, TOTAL	16065831	No Criteria	0.00
CHROMIUM VI, TOTAL	18540299	65788.34	3520.22
COPPER, TOTAL	7440508	291.60	200.69
CYANIDE	57125	52.80	52.80
LEAD, TOTAL	7439921	13113.58	594.19
MERCURY, TOTAL	7439976	111.81	9.36
NICKEL, TOTAL	7440020	4363.85	491.25
SELENIUM, TOTAL	7782492	15342.69	4439.28
SILVER, TOTAL	7440224	132.41	132.41
THALLIUM	7440280	No Criteria	29.33
ZINC, TOTAL	7440666	5023.26	5023.26
VOLATILE ORGANIC COMPOUNDS			
ACROLEIN	107028	No Criteria	18096.00
ACRYLONITRILE	107131	No Criteria	156.00
BENZENE	71432	No Criteria	31824.00
BROMOFORM	75252	No Criteria	87360.00
CARBON TETRACHLORIDE	56235	No Criteria	998.40
CHLOROBENZENE	108907	No Criteria	99840.00
CHLORODIBROMOMETHANE	124481	No Criteria	8112.00
CHLOROFORM	67663	No Criteria	293280.00
DICHLOROBROMOMETHANE	75274	No Criteria	10608.00
1,2DICHLOROETHANE	107062	No Criteria	23088.00
1,1DICHLOROETHYLENE	75354	No Criteria	443040.00
1,2DICHLOROPROPANE	78875	No Criteria	9360.00
1,3DICHLOROPROPYLENE	542756	No Criteria	1310.40
ETHYLBENZENE	100414	No Criteria	131040.00
BROMOMETHANE (methyl bromide)	74839	No Criteria	93600.00
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00
METHYLENE CHLORIDE	75092	No Criteria	368160.00
1,1,2,2TETRACHLOROETHANE	79345	No Criteria	2496.00

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AV LIMIT (ug/L)
TETRACHLOROETHYLENE	127184	No Criteria	2059.2
TOLUENE	108883	No Criteria	936000.0
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	624000.0
1,1,1TRICHLOROETHANE	71556	No Criteria	0.0
1,1,2TRICHLOROETHANE	79005	No Criteria	9984.0
TRICHLOROETHYLENE	79016	No Criteria	18720.0
VINYL CHLORIDE	75014	No Criteria	149.7
ACID ORGANIC COMPOUNDS			
2CHLOROPHENOL	95578	No Criteria	9360.0
2,4DICHLOROPHENOL	120832	No Criteria	18096.0
2,4DIMETHYLPHENOL	105679	No Criteria	53040.0
4,6DINITRO2METHYL PHENOL	534521	No Criteria	17472.0
2,4DINITROPHENOL	51285	No Criteria	330720.0
4NITROPHENOL	88755	No Criteria	0.0
PENTACHLOROPHENOL	87865	686.40	492.9
PHENOL	108952	No Criteria	106080000.0
2,4,6TRICHLOROPHENOL	88062	No Criteria	1497.6
BASE NEUTRAL COMPUNDS			
ACENAPHTHENE	83329	No Criteria	61776.0
ANTHRACENE	120127	No Criteria	2496000.0
BENZIDINE	92875	No Criteria	0.1
PAHs		No Criteria	11.2
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	330.7
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	40560
BIS(2ETHYLHEXYL)PHTHALATE	117817	No Criteria	1372.8
BUTYL BENZYL PHTHALATE	85687	No Criteria	118560.0
2CHLORONAPHTHALENE	91587	No Criteria	99840.0
1,2DICHLOROBENZENE	95501	No Criteria	81120.0
1,3DICHLOROBENZENE	541731	No Criteria	59904.0
1,4DICHLOROBENZENE	106467	No Criteria	11856.0
3,3DICHLOROBENZIDENE	91941	No Criteria	17.47
DIETHYL PHTHALATE	84662	No Criteria	2745600.0
DIMETHYL PHTHALATE	131113	No Criteria	68640000.0
DI-n-BUTYL PHTHALATE	84742	No Criteria	280800.0
2,4DINITROTOLUENE	121142	No Criteria	2121.6
1,2DIPHENYLHYDRAZINE	122667	No Criteria	124.8
FLUORANTHENE	206440	No Criteria	8736.0

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Newport WPCP RIPDES PERMIT #: RI0100293

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
FLUORENE	86737	No Criteria	330720.00
HEXACHLOROBENZENE	118741	No Criteria	0.18
HEXACHLOROBUTADIENE	87683	No Criteria	11232.00
HEXACHLOROCYCLOPENTADIENE	77474	No Criteria	68640.00
HEXACHLOROETHANE	67721	No Criteria	2059.20
ISOPHORONE	78591	No Criteria	599040.00
NAPHTHALENE	91203	No Criteria	0.00
NITROBENZENE	98953	No Criteria	43056.00
N-NITROSODIMETHYLAMINE	62759	No Criteria	1872.00
N-NITROSODI-N-PROPYLAMINE	621647	No Criteria	318.24
N-NITROSODIPHENYLAMINE	86306	No Criteria	3744.00
PYRENE	129000	No Criteria	249600.00
1,2,4trichlorobenzene	120821	No Criteria	4368.00
PESTICIDES/PCBs			
ALDRIN	309002	68.64	0.03
Alpha BHC	319846	No Criteria	3.06
Beta BHC	319857	No Criteria	10.61
Gamma BHC (Lindane)	58899	8.45	8.45
CHLORDANE	57749	4.75	0.25
4,4DDT	50293	6.86	0.06
4,4DDE	72559	No Criteria	0.14
4,4DDD	72548	No Criteria	0.19
DIELDRIN	60571	37.49	0.03
ENDOSULFAN (alpha)	959988	1.80	0.54
ENDOSULFAN (beta)	33213659	1.80	0.54
ENDOSULFAN (sulfate)	1031078	No Criteria	5553.60
ENDRIN	72208	1.95	0.14
ENDRIN ALDEHYDE	7421934	No Criteria	18.72
HEPTACHLOR	76448	2.80	0.05
HEPTACHLOR EPOXIDE	1024573	2.80	0.02
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.04
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.0000032
TOXAPHENE	8001352	11.09	0.01
TRIBUTYLTIN		22.18	0.46

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AV LIMIT (ug/L)
NON PRIORITY POLLUTANTS OTHER SUBSTANCES			
ALUMINUM, TOTAL	7429905	No Criteria	0.0
AMMONIA (as N), WINTER (NOV-APR	7664417	911433.60	159007.6
AMMONIA (as N), SUMMER (MAY-OC	7664417	316831.68	56422.0
4BROMOPHENYL PHENYL ETHER		No Criteria	0.0
CHLORIDE	16887006	No Criteria	
CHLORINE	7782505	858.00	58
4CHLORO2METHYLPHENOL		No Criteria	0.0
1CHLORONAPHTHALENE		No Criteria	0.0
4CHLOROPHENOL	106489	No Criteria	0.0
2,4DICHLORO6METHYLPHENOL		No Criteria	0.0
1,1DICHLOROPROPANE		No Criteria	0.0
1,3DICHLOROPROPANE	142289	No Criteria	0.0
2,3DINITROTOLUENE		No Criteria	0.0
2,4DINITRO6METHYL PHENOL		No Criteria	0.0
IRON	7439896	No Criteria	0.0
pentachlorobenzene	608935	No Criteria	0.0
PENTACHLOROETHANE		No Criteria	0.0
1,2,3,5tetrachlorobenzene		No Criteria	0.0
1,1,1,2TETRACHLOROETHANE	630206	No Criteria	0.0
2,3,4,6TETRACHLOROPHENOL	58902	No Criteria	0.0
2,3,5,6TETRACHLOROPHENOL		No Criteria	
2,4,5TRICHLOROPHENOL	95954	No Criteria	
2,4,6TRINITROPHENOL	88062	No Criteria	0.0
XYLENE	1330207	No Criteria	0.0

ATTACHMENT B

Summary of Discharge Monitoring Report Data
March 2002 through March 2007

NEWPORT WPCF
DMR Data Summary 7/16/07

002C

Flow, total Location = 1

	DAILY MX
Mean	1 Mgal
Minimum	1 Mgal
Maximum	1 Mgal
Count	60

Flow, total Location = G

	DAILY MX
Mean	3.88 Mgal
Minimum	1.2 Mgal
Maximum	10.9 Mgal
Count	60

BOD, 5-day, percent removal Location = K

	MINIMUM
Mean	44.15 %
Minimum	0 %
Maximum	89 %
Count	60

Settleable solids percent removal Location = K

	DAILY MX
Mean	53.23 %
Minimum	0 %
Maximum	98.9 %
Count	60

Solids, suspended percent removal Location = K

	MINIMUM
Mean	50.75 %
Minimum	0 %
Maximum	87 %
Count	60

NEWPORT WPCF
DMR Data Summary 7/16/07
003B

BOD, 5-day, 20 deg. C Location = 1

	DAILY MX
Mean	mg/L
Minimum	mg/L
Maximum	mg/L
Count	60

Chlorine, total residual Location = 1

	DAILY MX
Mean	mg/L
Minimum	mg/L
Maximum	mg/L
Count	60

Coliform, fecal general Location = 1

	DAILY MX
Mean	MPN/100mL
Minimum	MPN/100mL
Maximum	MPN/100mL
Count	60

Flow, total Location = 1

	DAILY MX
Mean	Mgal
Minimum	Mgal
Maximum	Mgal
Count	60

Oil & grease Location = 1

	DAILY MX
Mean	mg/L
Minimum	mg/L
Maximum	mg/L
Count	60

Solids, settleable Location = 1

	DAILY MX
Mean	mL/L
Minimum	mL/L
Maximum	mL/L
Count	60

Solids, total suspended Location = 1

	DAILY MX
Mean	mg/L
Minimum	mg/L
Maximum	mg/L
Count	60

007A

Chlorine, total residual Location = 1

	DAILY MX
Mean	0.27 mg/L
Minimum	0 mg/L
Maximum	1.3 mg/L
Count	60

Coliform, fecal general Location = 1

	DAILY MX
Mean	4,080,382.61 MPN/100mL
Minimum	1,600 MPN/100mL
Maximum	24,000,000 MPN/100mL
Count	60

BOD, 5-day, 20 deg. C Location = G

	DAILY MX
Mean	136.73 mg/L
Minimum	13 mg/L
Maximum	2,000 mg/L
Count	60

NEWPORT WPCF
DMR Data Summary 7/16/07

Coliform, fecal general Location = G

	DAILY MX
Mean	4,804,513.04 MPN/100mL
Minimum	1,600 MPN/100mL
Maximum	24,000,000 MPN/100mL
Count	60

Flow, total Location = G

	DAILY MX
Mean	2.18 Mgal
Minimum	0.05 Mgal
Maximum	16.05 Mgal
Count	60

Oil & grease Location = G

	DAILY MX
Mean	51.96 mg/L
Minimum	5 mg/L
Maximum	300 mg/L
Count	60

Solids, settleable Location = G

	DAILY MX
Mean	3.8 mL/L
Minimum	0 mL/L
Maximum	15 mL/L
Count	60

Solids, total suspended Location = G

	DAILY MX
Mean	208.07 mg/L
Minimum	17 mg/L
Maximum	1,700 mg/L
Count	60

<u>010A</u>

BOD, 5-day, 20 deg. C Location = 1

	DAILY MX
Mean	33.47 mg/L

NEWPORT WPCF
DMR Data Summary 7/16/07

	DAILY MX
Minimum	8 mg/L
Maximum	112 mg/L
Count	60

Chlorine, total residual Location = 1

	DAILY MX
Mean	1.37 mg/L
Minimum	0 mg/L
Maximum	3.4 mg/L
Count	60

Coliform, fecal general Location = 1

	DAILY MX
Mean	3,619,341.03 MPN/100mL
Minimum	400 MPN/100mL
Maximum	24,000,000 MPN/100mL
Count	60

Flow, total Location = 1

	DAILY MX
Mean	0.55 Mgal
Minimum	0.5 Mgal
Maximum	0.6 Mgal
Count	60

Oil & grease Location = 1

	DAILY MX
Mean	14.84 mg/L
Minimum	1.9 mg/L
Maximum	55 mg/L
Count	60

Solids, settleable Location = 1

	DAILY MX
Mean	0.21 mL/L
Minimum	0 mL/L
Maximum	1 mL/L
Count	60

NEWPORT WPCF
DMR Data Summary 7/16/07

Solids, total suspended Location = 1

	DAILY MX
Mean	31.08 mg/L
Minimum	5 mg/L
Maximum	108 mg/L
Count	60

FACA

BOD, 5-day, 20 deg. C Location = 1

	MO AVG	DAILY MX
Mean	1,155.25 lb/d	2,851.63 lb/d
Minimum	272 lb/d	437 lb/d
Maximum	4,148 lb/d	22,305 lb/d
Count	60	60

BOD, 5-day, 20 deg. C Location = 1

	MO AVG	WKLY AVG	DAILY MX
Mean	14.47 mg/L	23.55 mg/L	33.73 mg/L
Minimum	5 mg/L	7 mg/L	7 mg/L
Maximum	82 mg/L	244 mg/L	437 mg/L
Count	60	60	60

Chlorine, total residual Location = 1

	MO AVG	DAILY MX
Mean	356.78 ug/L	675.4 ug/L
Minimum	96 ug/L	283 ug/L
Maximum	1,013 ug/L	1,500 ug/L
Count	60	60

Coliform, fecal general Location = 1

	MO GEO	WKLY GEO	DAILY MX
Mean	39.72 MPN/100mL	228.25 MPN/100mL	802,501.1 MPN/100mL
Minimum	3 MPN/100mL	5 MPN/100mL	8 MPN/100mL
Maximum	358 MPN/100mL	2,846 MPN/100mL	24,000,000 MPN/100mL
Count	60	60	60

NEWPORT WPCF
DMR Data Summary 7/16/07

Cyanide, total (as CN) Location = 1

	MO AVG	DAILY MX
Mean	9.86 ug/L	9.86 ug/L
Minimum	1 ug/L	1 ug/L
Maximum	20 ug/L	20 ug/L
Count	60	60

Flow, in conduit or thru treatment plant Location = 1

	MO AVG	DAILY MX
Mean	9.96 Mgal/d	16.48 Mgal/d
Minimum	5.4 Mgal/d	7.2 Mgal/d
Maximum	15.7 Mgal/d	35.3 Mgal/d
Count	60	60

Oil & grease Location = 1

	DAILY MX
Mean	8.28 mg/L
Minimum	0.6 mg/L
Maximum	62 mg/L
Count	60

pH Location = 1

	MINIMUM	MAXIMUM
Mean	6.83 SU	7.26 SU
Minimum	6.5 SU	7 SU
Maximum	7.2 SU	7.7 SU
Count	60	60

Solids, settleable Location = 1

	WKLY AVG	DAILY MX
Mean	0.56 mL/L	2.63 mL/L
Minimum	0.1 mL/L	0.1 mL/L
Maximum	20.9 mL/L	100 mL/L
Count	60	60

NEWPORT WPCF
DMR Data Summary 7/16/07

Solids, total suspended Location = 1

	MO AVG	DAILY MX
Mean	1,153.2 lb/d	4,661.48 lb/d
Minimum	229 lb/d	585 lb/d
Maximum	4,745 lb/d	27,868 lb/d
Count	60	60

Solids, total suspended Location = 1

	MO AVG	WKLY AVG	DAILY MX
Mean	14.67 mg/L	24.67 mg/L	47 mg/L
Minimum	5 mg/L	6 mg/L	8 mg/L
Maximum	94 mg/L	179 mg/L	546 mg/L
Count	60	60	60

LC50 Statre 48Hr Acute Mysid. Bahia Location = B

	DAILY MN
Mean	100 %
Minimum	100 %
Maximum	100 %
Count	20

BOD, 5-day, 20 deg. C Location = G

	MO AVG	WKLY AVG
Mean	13,306.72 lb/d	17,312.18 lb/d
Minimum	8,867 lb/d	9,372 lb/d
Maximum	87,407 lb/d	177,340 lb/d
Count	60	60

BOD, 5-day, 20 deg. C Location = G

	MO AVG	WKLY AVG	DAILY MX
Mean	172.88 mg/L	238 mg/L	309.32 mg/L
Minimum	72 mg/L	89 mg/L	95 mg/L
Maximum	1,200 mg/L	2,547 mg/L	3,306 mg/L
Count	60	60	60

Oil & grease Location = G

	DAILY MX
Mean	44.66 mg/L
Minimum	12 mg/L
Maximum	230 mg/L
Count	60

NEWPORT WPCF
DMR Data Summary 7/16/07

Solids, total suspended Location = G

	MO AVG	WKLY AVG
Mean	13,927.07 lb/d	17,180.78 lb/d
Minimum	7,110 lb/d	8,351 lb/d
Maximum	46,443 lb/d	89,134 lb/d
Count	60	60

Solids, total suspended Location = G

	MO AVG	WKLY AVG	DAILY MX
Mean	182.03 mg/L	235.92 mg/L	356.1 mg/L
Minimum	73 mg/L	92 mg/L	112 mg/L
Maximum	637 mg/L	1,238 mg/L	1,846 mg/L
Count	60	60	60

BOD, 5-day, percent removal Location = K

	MINIMUM
Mean	90.65 %
Minimum	79 %
Maximum	98 %
Count	60

Solids, suspended percent removal Location = K

	MO AV MN
Mean	90.85 %
Minimum	71 %
Maximum	98 %
Count	60

ATTACHMENT C

Summary of State User Fee Data
March 2002 through March 2007

Facility Newport

ParameterName	Date	Cycle	Concentration
4,4'- DDE	9/14/2004	17	0.05
Aldrin	9/14/2004	17	0.06
Bis(2-ethylhexyl)	9/20/2005	18	10
BOD	8/29/2002	15	12000
BOD	9/11/2003	16	21000
BOD	9/14/2004	17	14000
BOD	9/23/2004	17	13000
BOD	9/20/2005	18	9000
BOD	8/1/2006	19	9000
Bromodichlorometha	8/29/2002	15	1
Bromodichlorometha	9/11/2003	16	1
Bromoform	9/11/2003	16	1
Chloroform	8/29/2002	15	3
Chloroform	9/11/2003	16	2.2
Chloroform	9/23/2004	17	2.4
Chloroform	9/20/2005	18	1.9
Chloroform	8/1/2006	19	2.8
Chromium, Total	8/29/2002	15	5.6
Chromium, Total	9/14/2004	17	6
Chromium, Total	9/23/2004	17	8
Chromium, Total	9/20/2005	18	8
Chromium, Total	8/1/2006	19	7
Copper, Total	8/1/2006	19	37

Dibromochlorometha	9/11/2003	16	1.2
Endrin Aldehyde	9/11/2003	16	0.08
Heptachlor	9/11/2003	16	0.12
Lead, Total	9/20/2005	18	3
Mercury, Total	8/29/2002	15	1.4
Tetrachloroethene	9/20/2005	18	1.4
TSS	8/29/2002	15	36000
TSS	9/11/2003	16	22000
TSS	9/14/2004	17	11000
TSS	9/23/2004	17	9000
TSS	9/20/2005	18	6000
TSS	8/1/2006	19	1000
Zinc, Total	9/11/2003	16	25
Zinc, Total	9/20/2005	18	25
Zinc, Total	8/1/2006	19	24

ATTACHMENT D

Comparison of Allowable Limits with Discharge Monitoring Report Data and State User Fee Data

Facility Name: *Newport WPCP*
RIPDES Permit #: *RI0100293*
Outfall #: *001A*

NOTE: METALS LIMITS ARE TOTAL METALS

Parameter	CAS #	Concentration Limits (ug/L) Based on WQ Criteria		Antideg. Limits (ug/L)	Ave UFP Data (ug/L) 3/02 - 3/07		Ave. DMR Data (ug/L) 3/02 - 3/07		Potential Permit Limits (ug/L)	
		Daily Max	Monthly Ave	Monthly Ave	Max	Ave	Daily Max	Monthly Ave	Daily Max	Monthly Ave
PRIORITY POLLUTANTS										
TOXIC METALS AND CYANIDE										
ANTIMONY	7440360	No Criteria	39936.00	---	---	---	---	---	---	39936
ARSENIC (limits are total recoverable)	7440382	3643.20	87.36	---	---	---	---	---	3643.2	87.36
ASBESTOS	1332214	No Criteria	0.00	---	---	---	---	---	---	0
BERYLLIUM	7440417	No Criteria	0.00	---	---	---	---	---	---	0
CADMIUM (limits are total recoverable)	7440439	2388.05	618.77	---	---	---	---	---	2388.05	618.77
CHROMIUM III (limits are total recoverable)	16065831	No Criteria	0.00	---	---	---	---	---	---	0
CHROMIUM VI (limits are total recoverable)	18540299	65788.34	3520.22	---	8	6.92	---	---	65788.34	3520.22
COPPER (limits are total recoverable)	7440508	291.60	200.69	---	37	37	---	---	291.6	200.69
CYANIDE	57125	52.80	52.80	---	---	---	9.86	9.86	52.8	52.8
LEAD (limits are total recoverable)	7439921	13113.58	594.19	---	3	3	---	---	13113.58	594.19
MERCURY (limits are total recoverable)	7439976	111.81	9.36	---	1.4	1.4	---	---	111.81	9.36
NICKEL (limits are total recoverable)	7440020	4363.85	491.25	---	---	---	---	---	4363.85	491.25
SELENIUM (limits are total recoverable)	7782492	15342.69	4439.28	---	---	---	---	---	15342.69	4439.28
SILVER (limits are total recoverable)	7440224	132.41	132.41	---	---	---	---	---	132.41	132.41
THALLIUM	7440280	No Criteria	29.33	---	---	---	---	---	---	29.33
ZINC (limits are total recoverable)	7440666	5023.26	5023.26	---	25	24.67	---	---	5023.26	5023.26
VOLATILE ORGANIC COMPOUNDS										
ACROLEIN	107028	No Criteria	18096.00	---	---	---	---	---	---	18096
ACRYLONITRILE	107131	No Criteria	156.00	---	---	---	---	---	---	156
BENZENE	71432	No Criteria	31824.00	---	---	---	---	---	---	31824
BROMOFORM	75252	No Criteria	87360.00	---	1	1	---	---	---	87360
CARBON TETRACHLORIDE	56235	No Criteria	998.40	---	---	---	---	---	---	998.4
CHLOROBENZENE	108907	No Criteria	99840.00	---	---	---	---	---	---	99840
CHLORODIBROMOMETHANE	124481	No Criteria	8112.00	---	1.2	1.2	---	---	---	8112
CHLOROFORM	67663	No Criteria	293280.00	---	3	2.46	---	---	---	293280
DICHLOROBROMOMETHANE	75274	No Criteria	10608.00	---	1	1	---	---	---	10608
1,2DICHLOROETHANE	107062	No Criteria	23088.00	---	---	---	---	---	---	23088
1,1DICHLOROETHYLENE	75354	No Criteria	443040.00	---	---	---	---	---	---	443040
1,2DICHLOROPROPANE	78875	No Criteria	9360.00	---	---	---	---	---	---	9360
1,3DICHLOROPROPYLENE	542756	No Criteria	1310.40	---	---	---	---	---	---	1310.4
ETHYLBENZENE	100414	No Criteria	131040.00	---	---	---	---	---	---	131040
BROMOMETHANE (methyl bromide)	74839	No Criteria	93600.00	---	---	---	---	---	---	93600

Facility Name: *Newport WPCP*
RIPDES Permit #: *RI0100293*
Outfall #: *001A*

NOTE: METALS LIMITS ARE TOTAL METALS

Parameter	CAS #	Concentration Limits (ug/L) Based on WQ Criteria		Antideg. Limits (ug/L)	Ave UFP Data (ug/L) 3/02 - 3/07		Ave. DMR Data (ug/L) 3/02 - 3/07		Potential Permit Limits (ug/L)	
		Daily Max	Monthly Ave	Monthly Ave	Max	Ave	Daily Max	Monthly Ave	Daily Max	Monthly Ave
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00	---	---	---	---	---	---	0
METHYLENE CHLORIDE	75092	No Criteria	368160.00	---	---	---	---	---	---	368160
1,1,2,2TETRACHLOROETHANE	79345	No Criteria	2496.00	---	---	---	---	---	---	2496
TETRACHLOROETHYLENE	127184	No Criteria	2059.20	---	1.4	1.4	---	---	---	2059.2
ENE	108883	No Criteria	936000.00	---	---	---	---	---	---	936000
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	624000.00	---	---	---	---	---	---	624000
1,1,1TRICHLOROETHANE	71556	No Criteria	0.00	---	---	---	---	---	---	0
1,1,2TRICHLOROETHANE	79005	No Criteria	9984.00	---	---	---	---	---	---	9984
TRICHLOROETHYLENE	79016	No Criteria	18720.00	---	---	---	---	---	---	18720
VINYL CHLORIDE	75014	No Criteria	149.76	---	---	---	---	---	---	149.76
ACID ORGANIC COMPOUNDS										
2CHLOROPHENOL	95578	No Criteria	9360.00	---	---	---	---	---	---	9360
2,4DICHLOROPHENOL	120832	No Criteria	18096.00	---	---	---	---	---	---	18096
2,4DIMETHYLPHENOL	105679	No Criteria	53040.00	---	---	---	---	---	---	53040
4,6DINITRO2METHYL PHENOL	534521	No Criteria	17472.00	---	---	---	---	---	---	17472
2,4DINITROPHENOL	51285	No Criteria	330720.00	---	---	---	---	---	---	330720
4NITROPHENOL	88755	No Criteria	0.00	---	---	---	---	---	---	0
PENTACHLOROPHENOL	87865	686.40	492.96	---	---	---	---	---	686.4	492.96
PHENOL	108952	No Criteria	106080000.00	---	---	---	---	---	---	106080000
2,4,6TRICHLOROPHENOL	88062	No Criteria	1497.60	---	---	---	---	---	---	1497.6
NEUTRAL COMPOUNDS										
ACENAPHTHENE	83329	No Criteria	61776.00	---	---	---	---	---	---	61776
ANTHRACENE	120127	No Criteria	2496000.00	---	---	---	---	---	---	2496000
BENZIDINE	92875	No Criteria	0.12	---	---	---	---	---	---	0.1248
POLYCYCLIC AROMATIC HYDROCARBONS		No Criteria	11.23	---	---	---	---	---	---	11.232
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	330.72	---	---	---	---	---	---	330.72
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	4056000.00	---	---	---	---	---	---	4056000
BIS(2ETHYLHEXYL)PHTHALATE	117817	No Criteria	1372.80	---	10	10	---	---	---	1372.8
BUTYL BENZYL PHTHALATE	85687	No Criteria	118560.00	---	---	---	---	---	---	118560
2CHLORONAPHTHALENE	91587	No Criteria	99840.00	---	---	---	---	---	---	99840
1,2DICHLOROBENZENE	95501	No Criteria	81120.00	---	---	---	---	---	---	81120
1,3DICHLOROBENZENE	541731	No Criteria	59904.00	---	---	---	---	---	---	59904
1,4DICHLOROBENZENE	106467	No Criteria	11856.00	---	---	---	---	---	---	11856
3,3DICHLOROBENZIDENE	91941	No Criteria	17.47	---	---	---	---	---	---	17.472

Facility Name: *Newport WPCP*
RIPDES Permit #: *RI0100293*
Outfall #: *001A*

NOTE: METALS LIMITS ARE TOTAL METALS

Parameter	CAS #	Concentration Limits (ug/L) Based on WQ Criteria		Antideg. Limits (ug/L)	Ave UFP Data (ug/L) 3/02 - 3/07		Ave. DMR Data (ug/L) 3/02 - 3/07		Potential Permit Limits (ug/L)	
		Daily Max	Monthly Ave	Monthly Ave	Max	Ave	Daily Max	Monthly Ave	Daily Max	Monthly Ave
IETHYL PHTHALATE	84662	No Criteria	2745600.00	---	---	---	---	---	---	2745600
IMETHYL PHTHALATE	131113	No Criteria	68640000.00	---	---	---	---	---	---	68640000
InBUTYL PHTHALATE	84742	No Criteria	280800.00	---	---	---	---	---	---	280800
,4DINITROTOLUENE	121142	No Criteria	2121.60	---	---	---	---	---	---	2121.6
PHENYLHYDRAZINE	122667	No Criteria	124.80	---	---	---	---	---	---	124.8
ANTHENE	206440	No Criteria	8736.00	---	---	---	---	---	---	8736
LUORENE	86737	No Criteria	330720.00	---	---	---	---	---	---	330720
EXACHLOROBENZENE	118741	No Criteria	0.18	---	---	---	---	---	---	0.18096
EXACHLOROBUTADIENE	87683	No Criteria	11232.00	---	---	---	---	---	---	11232
EXACHLOROCYCLOPENTADIENE	77474	No Criteria	68640.00	---	---	---	---	---	---	68640
EXACHLOROETHANE	67721	No Criteria	2059.20	---	---	---	---	---	---	2059.2
OPHORONE	78591	No Criteria	599040.00	---	---	---	---	---	---	599040
APHTHALENE	91203	No Criteria	0.00	---	---	---	---	---	---	0
ITROBENZENE	98953	No Criteria	43056.00	---	---	---	---	---	---	43056
NITROSODIMETHYLAMINE	62759	No Criteria	1872.00	---	---	---	---	---	---	1872
NITROSODINPROPYLAMINE	621647	No Criteria	318.24	---	---	---	---	---	---	318.24
NITROSODIPHENYLAMINE	86306	No Criteria	3744.00	---	---	---	---	---	---	3744
YRENE	129000	No Criteria	249600.00	---	---	---	---	---	---	249600
,2,4trichlorobenzene	120821	No Criteria	4368.00	---	---	---	---	---	---	4368
ESTICIDES/PCBs										
DRIN	309002	68.64	0.03	---	0.06	0.06	---	---	68.64	0.0312
p BHC	319846	No Criteria	3.06	---	---	---	---	---	---	3.0576
eta BHC	319857	No Criteria	10.61	---	---	---	---	---	---	10.608
amma BHC (Lindane)	58899	8.45	8.45	---	---	---	---	---	8.448	8.448
HLORDANE	57749	4.75	0.25	---	---	---	---	---	4.752	0.2496
,4DDT	50293	6.86	0.06	---	---	---	---	---	6.864	0.0624
,4DDE	72559	No Criteria	0.14	---	0.05	0.05	---	---	---	0.13728
,4DDD	72548	No Criteria	0.19	---	---	---	---	---	---	0.19344
IELDRIN	60571	37.49	0.03	---	---	---	---	---	37.488	0.033696
NDOSULFAN (alpha)	959988	1.80	0.54	---	---	---	---	---	1.7952	0.54288
NDOSULFAN (beta)	33213659	1.80	0.54	---	---	---	---	---	1.7952	0.54288
NDOSULFAN (sulfate)	1031078	No Criteria	5553.60	---	---	---	---	---	---	5553.6
NDRIN	72208	1.95	0.14	---	---	---	---	---	1.9536	0.14352
NDRIN ALDEHYDE	7421934	No Criteria	18.72	---	0.08	0.08	---	---	---	18.72

Facility Name: *Newport WPCP*
RIPDES Permit #: *RI0100293*
Outfall #: *001A*

NOTE: METALS LIMITS ARE TOTAL METALS

Parameter	CAS #	Concentration Limits (ug/L) Based on WQ Criteria		Antideg. Limits (ug/L)	Ave UFP Data (ug/L) 3/02 - 3/07		Ave. DMR Data (ug/L) 3/02 - 3/07		Potential Permit Limits (ug/L)	
		Daily Max	Monthly Ave	Monthly Ave	Max	Ave	Daily Max	Monthly Ave	Daily Max	Monthly Ave
HEPTACHLOR	76448	2.80	0.05	---	0.12	0.12	---	---	2.7984	0.049296
HEPTACHLOR EPOXIDE	1024573	2.80	0.02	---	---	---	---	---	2.7984	0.024336
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.04	---	---	---	---	---	---	0.039936
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00	---	---	---	---	---	---	3.1824E-06
PHENE	8001352	11.09	0.01	---	---	---	---	---	11.088	0.01248
TRIBUTYLTIN		22.18	0.46	---	---	---	---	---	22.176	0.46176
ION PRIORITY POLLUTANTS:										
OTHER SUBSTANCES										
ALUMINUM (limits are total recoverable)	7429905	No Criteria	0.00	---	---	---	---	---	---	0
AMMONIA (winter)	7664417	911433.60	159007.68	---	---	---	---	---	911433.6	159007.68
AMMONIA (summer)		316831.68	56422.08	---	---	---	---	---	316831.68	56422.08
BROMOPHENYL PHENYL ETHER	16887006	No Criteria	0.00	---	---	---	---	---	---	0
CHLORIDE	7782505	No Criteria	0.00	---	---	---	---	---	---	0
CHLORINE		858.00	585.00	---	---	---	675.4	356.78	858	585
CHLORO2METHYLPHENOL		No Criteria	0.00	---	---	---	---	---	---	0
CHLORONAPHTHALENE	106489	No Criteria	0.00	---	---	---	---	---	---	0
CHLOROPHENOL		No Criteria	0.00	---	---	---	---	---	---	0
4DICHLORO6METHYLPHENOL		No Criteria	0.00	---	---	---	---	---	---	0
1DICHLOROPROPANE	142289	No Criteria	0.00	---	---	---	---	---	---	0
2DICHLOROPROPANE		No Criteria	0.00	---	---	---	---	---	---	0
NITROTOLUENE		No Criteria	0.00	---	---	---	---	---	---	0
4DINITRO6METHYL PHENOL	7439896	No Criteria	0.00	---	---	---	---	---	---	0
RON	608935	No Criteria	0.00	---	---	---	---	---	---	0
entachlorobenzene		No Criteria	0.00	---	---	---	---	---	---	0
ENTACHLOROETHANE		No Criteria	0.00	---	---	---	---	---	---	0
2,3,5tetrachlorobenzene	630206	No Criteria	0.00	---	---	---	---	---	---	0
1,1,2TETRACHLOROETHANE	58902	No Criteria	0.00	---	---	---	---	---	---	0
3,4,6TETRACHLOROPHENOL		No Criteria	0.00	---	---	---	---	---	---	0
3,5,6TETRACHLOROPHENOL	95954	No Criteria	0.00	---	---	---	---	---	---	0
4,5TRICHLOROPHENOL	88062	No Criteria	0.00	---	---	---	---	---	---	0
4,6TRINITROPHENOL	1330207	No Criteria	0.00	---	---	---	---	---	---	0
YLENE		No Criteria	0.00	---	---	---	---	---	---	0

ATTACHMENT E

City of Newport Rainfall Depth-Duration-Frequency Curve

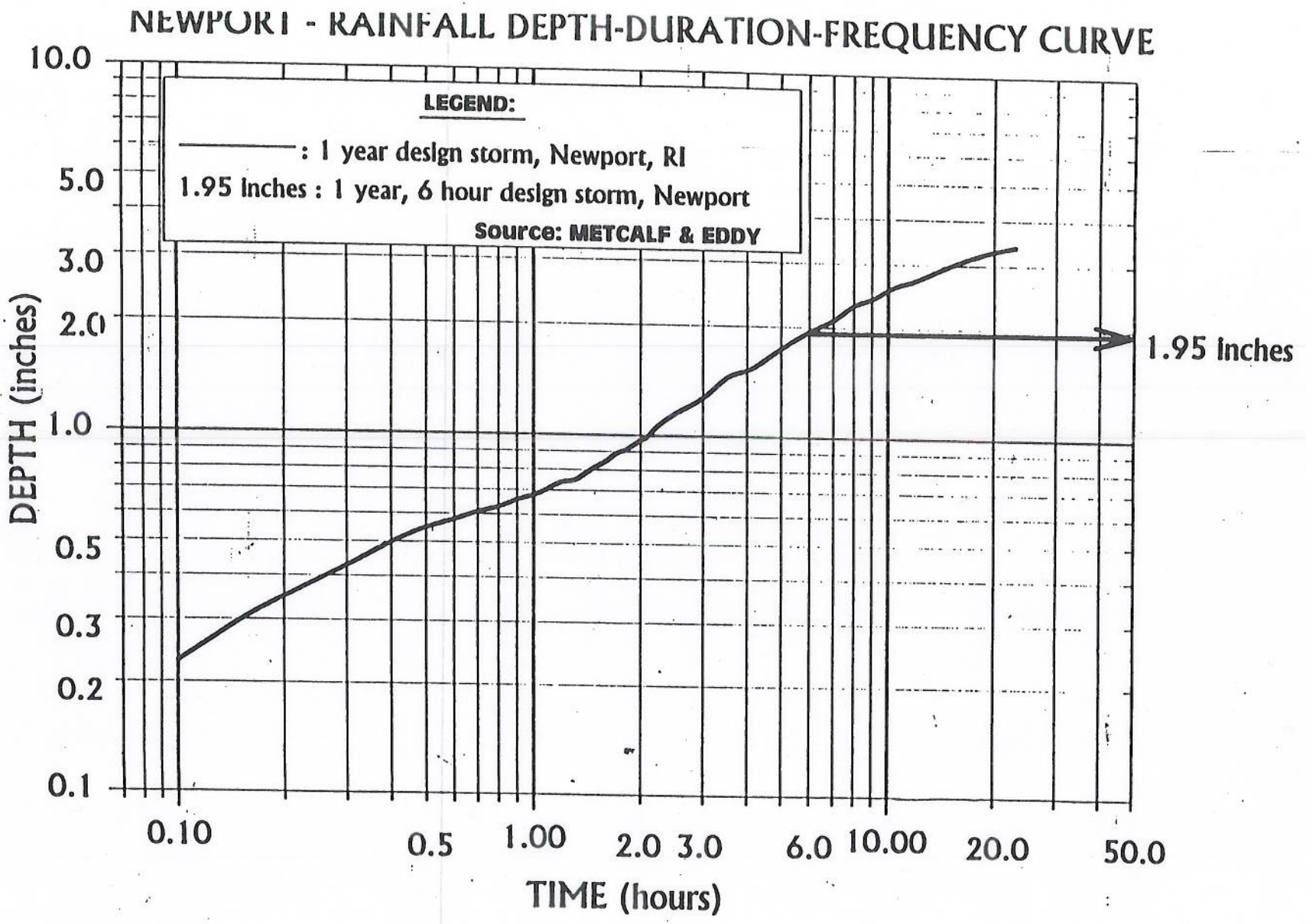


Figure 5. One year rainfall depth-duration-frequency relationship for Newport, Rhode Island. Flows generated by a rain event which is more frequently occurring than the Newport one year, six hour storm and have a total depth less than 1.95 inches are subject to the limitations and requirements contained in the RIPDES Permit. If when the depth and duration of a storm are plotted, the corresponding point on the graph falls below the one year design storm curve, then the storm is more frequently occurring.

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. **RI0100293**

NAME AND ADDRESS OF APPLICANT:

The City of Newport & Earth Tech, Inc.
250 Connell Highway
Newport, RI 02840

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

The Newport Pollution Control Plant (Newport WPCP)
250 Connell Highway
Newport, RI 02840,
Long Wharf CSO, Washington Street CSO Facility, and
Wellington Avenue Microstraining Facility

RECEIVING WATER: **Narragansett Bay**

CLASSIFICATION: **SB1 (Newport WPCP) & SB (CSO Facilities)**

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

The above-named applicant has applied to the Rhode Island Department of Environmental Management (RIDEM) 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 Newport Water Pollution Control Plant (001A), Long Wharf CSO (003A), Washington Street Combined Sewer Overflow Facility (010A), and Wellington Avenue Microstraining Facility (007A). Schematics of the facilities are shown in Figure 1 through Figure 4.

II. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters based on DMR data from March 2002 through March 2007 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.

IV. Permit Basis and Explanation of Effluent Limitation Derivation

The City of Newport owns and operates the Newport Water Pollution Control Plant (Newport WPCP) located on 250 Connell Highway in Newport, Rhode Island. The discharge to Narragansett Bay consists of treated sanitary sewage contributed by the municipalities of Newport, Middletown and Portsmouth. Basic flow diagrams of primary and secondary treatment at the Newport WPCP are shown in Figures 1 and 2, respectively. Treatment consists of: Coarse Screening, Comminution, Primary Settling, Aeration, Secondary Settling, Chlorination, and Dechlorination. The City of Newport also owns and operates Combined Sewer Overflow (CSO) facilities located at Long Wharf, Washington Street, and Wellington Avenue.

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 (RIPDES), both filed pursuant to RIGL Chapter 46-12, as amended. RIDEM's primary authority over the permit comes from the Environmental Protection Agency's delegation of the program in September 1984 under the Federal 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 water quality-based discharge levels based on background data and available dilution; assigning appropriate Best Professional Judgment (BPJ) limits; 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 "Newport Water Pollution Control Plant Permit Development Document" is available upon request.

The "Average Monthly" and "Average Weekly" BOD_5 and TSS limitations plus the pH limitations for the Newport WPCP are based upon the secondary treatment requirements of Section 301(b)(1)(B) of the Clean Water Act (CWA) as defined in 40 CFR 133.102 (a) - (c). The "Maximum Daily" BOD_5 and TSS limits and the fecal coliform limits for the WPCP are based on Rhode Island requirements for Publicly Owned Treatment Works (POTWs) under Section 401(a)(1) of the CWA and in 40 CFR 124.53 and 124.56. The "Percent Removal" requirements for the WPCP 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.

The permit limitations for BOD_5, BOD_5 %-Removal, TSS and TSS %-Removal listed on Pages 6 through 10 for the City of Newport's three (3) CSOs namely the Long Wharf CSO (Outfall 003A), Washington Street CSO Facility (Outfall 010A), and the Wellington Avenue Microstraining Facility (Outfall 007A), are based upon the RIDEM CSO Policy. The CSOs are shown in Figures 3 and 4. The goal of the Policy is that each CSO discharge receives equivalent primary treatment. Equivalent primary treatment is defined as the use of technologies such that the treated effluent results in 50% removal of the TSS and 35% removal of the BOD_5 loadings, or 100% removal of settleable solids, whichever is demonstrated to have the greatest water quality benefit. For permitting purposes Outfall 002C was created to determine percent removals for the combined Long Wharf/Washington Street flows. All flows created by the one (1)-year six (6)-hour storm, and all storms occurring more frequently are subject to this requirement. For the purposes of CSO monitoring requirements, an overflow shall be defined as an event which causes effluent to enter the receiving water via Outfalls 003A, 007A, or 010A, for a time greater than or equal to fifteen (15) minutes. Overflow occurrences shall be considered to be separate overflows, if six (6) or more hours separates two (2) distinct overflow events. Any discharge from a CSO to the receiving water, regardless of the duration, must be reported as a CSO to the DEM's Operations and Maintenance Program. A rainfall depth-duration-frequency relationship for the City of Newport was developed by Metcalf and Eddy in 1986 and is presented in Figure 5. In order to determine if a particular storm event is equal to or more frequently occurring than the one (1)-year six (6)-hour design storm, and therefore subject to the CSO permit limits, the depth and duration of a particular event are entered into the chart. If the corresponding location in the chart falls on or below the one (1)-year design storm curve, then the rain event is equal to or more frequently occurring than the design storm, and the CSO permit limitations and the RI CSO Policy apply. The monitoring only requirements for Settleable Solids and Settleable Solids %-Removal for the three CSO's are included to provide data that will facilitate CSO Policy compliance determination.

The monitor only requirements for Fecal Coliform, Total Residual Chlorine, and Oil and Grease, as well as the requirement to submit a semiannual CSO Summary Report, are included to provide a database to assist evaluation of wet weather impacts upon Newport Harbor and Narragansett Bay water quality resulting from CSOs. No dry weather overflows are permitted.

In order to evaluate the need for water quality based limits for the Newport WPCP, it is necessary to determine the mixing which occurs in the immediate vicinity of the wastewater discharge (initial dilution). The Newport WPCP effluent is discharged through a 42-inch pipe that is approximately 600 feet offshore and is fitted with a diffuser. The pipe diffuser consists of four (4) 24-inch ports, each of which is 30 feet in length. The Office defined acute and chronic mixing zones in accordance with guidance provided by the U.S. EPA publication entitled "Technical Support Document for Water Quality Based Toxics Control." The procedure used was to limit the acute mixing zone to a small area where rapid mixing occurs and the chronic mixing zone to a larger area where bay currents and diffusion provide additional mixing. Using the results of the EPA mixing zone guidance, the acute zone is defined as a circular region centered at the outfall with a radius of approximately 27 meters. The chronic zone is also circular, centered at the diffuser midpoint, and has a radius of approximately 100 meters. In order to determine dilution factors for both mixing zones, the EPA computer model, CORMIX2, was applied.

Rule 17 of the RIPDES Regulations requires the use of the design flow when establishing limits for POTWs. Using the design flow of 10.7 MGD, the mean low water depth at the outfall of 35 feet, a conservative estimate of ambient current velocity (0.16 feet per second) and the assumption of stagnant receiving water conditions, an acute dilution of 66:1 and a chronic dilution of 78:1 were determined for the discharge using CORMIX2. The mixing zones are illustrated in Figure 6. A document which outlines the development of the mixing zones and dilution factors is available upon request.

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, 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. Based on these comparisons, water quality limitations have been deemed necessary for Total Residual Chlorine. Aldrin and Heptachlor were only detected during one User Fee Program priority pollutant scan. However, these detections are believed to be the result of laboratory interference. Therefore, limits for Aldrin and Heptachlor are not required. The data for Total Cyanide clearly demonstrates that there is no reasonable potential for the discharge to exceed water quality criteria. 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. Also, due to Consent Agreement RIA-292, which became effective November 23, 1999, a sodium bisulfite dechlorination system was installed and has been in service since September 18, 2002, therefore, the Newport WPCP should be able to comply with the RIPDES water quality based limitations for TRC as the final effluent is being dechlorinated.

Oil and Grease monitoring requirements were assigned in the previous permit issued in November 1997 and have been maintained in this permit in order to serve as a process control parameter. Monitoring data will serve as an indicator of excessive levels of Oil and Grease in the collection system that is typically attributed to restaurants and other sources of Oil and Grease loading which discharge to the sewer collection system. The City of Newport and the RIDEM will be able to use this data to track and potentially initiate corrective action if necessary to prevent backups and blockages within the sewer collection system.

The requirement of testing for nutrients, TKN, nitrate and nitrite is necessary to make a determination on nutrient loadings in the receiving water. This information will aid the Department in future decision making on the necessity of nutrient removals from the treatment plant wastewater.

Evaluation of the data collected for biotoxicity has revealed that the prechlorinated effluent samples from the treatment plant have consistently demonstrated acceptable toxicity for Mysids. The State policy is to require a LC_{50} of $\geq$100% effluent. Toxicity results for effluent collected prior to chlorination had LC_{50} values >100% effluent. The bioassay requirements in the permit, of one (1) acute toxicity test to be completed on final effluent once per quarter, shall assure the continued control of toxicity in the effluent. The actual data can be found in Attachment A-2. The biomonitoring requirements are set forth in 40 CFR 131.11 and in the State's Water Quality Regulations to assure control of toxicity in the effluent. If toxicity is demonstrated, then toxicity identification and reduction will be required.

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 required priority pollutant scans are specified in the State User Fee program.

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 requirements for the permittee to comply with the State's Sludge Regulations and the permittee's RIDEM Order of Approval for sludge disposal in accordance with the requirements of Section 405(d) of the Clean Water Act (CWA).

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 City receives significant discharges of industrial wastewater.

Since all of the limits in this permit are at least as stringent as those in the previous permit, the Office has determined that all permit limitations are consistent with the Rhode Island Antidegradation policy. 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:

Aaron Mello
Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 222-6820, Ext. 7405

9/28/07
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:

PARAMETER	AVERAGE[1]	MAXIMUM[2]
FLOW (MGD)	9.96 MGD	16.48 MGD
BOD_5 (PPM)	14.47 mg/l	33.73 mg/l
TSS	14.67 mg/l	47 mg/l
Fecal Coliform	39.72 MPN/100 ml	802501.1 MPN/100 ml
pH	6.83 S.U. (Minimum)	7.26 S.U. (Maximum)
Chlorine Residual	356.78 ug/l	675.4 ug/l
Cyanide (Total)	9.86 ug/l	9.86 ug/l
Oil & Grease		8.28 mg/l
Settleable Solids		2.63 ml/l
BOD_5 (% Removal)	90.65 %	
TSS (% Removal)	90.85 %	

[1]Data represents the mean of the monthly average data from 3/02 – 3/07
[2]Data represents the mean of the daily maximum data from 3/02 – 3/07

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

Pre-Cl_2 Mysid (Shrimp)

2002 1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	2003 1st qtr.	2nd qtr.	3rd qtr.	4th qtr.
>100%	>100%	>100%	>100%	>100%	>100%	>100%	>100%
2004 1st qtr.	**2nd qtr.**	**3rd qtr.**	**4th qtr.**	**2005 1st qtr.**	**2nd qtr.**	**3rd qtr.**	**4th qtr.**
>100%	>100%	>100%	>100%	>100%	>100%	>100%	>100%
2006 1st qtr.	**2nd qtr.**	**3rd qtr.**	**4th qtr.**	**2007 1st qtr.**	**2nd qtr.**		
>100%	>100%	>100%	>100%	>100%	100%		

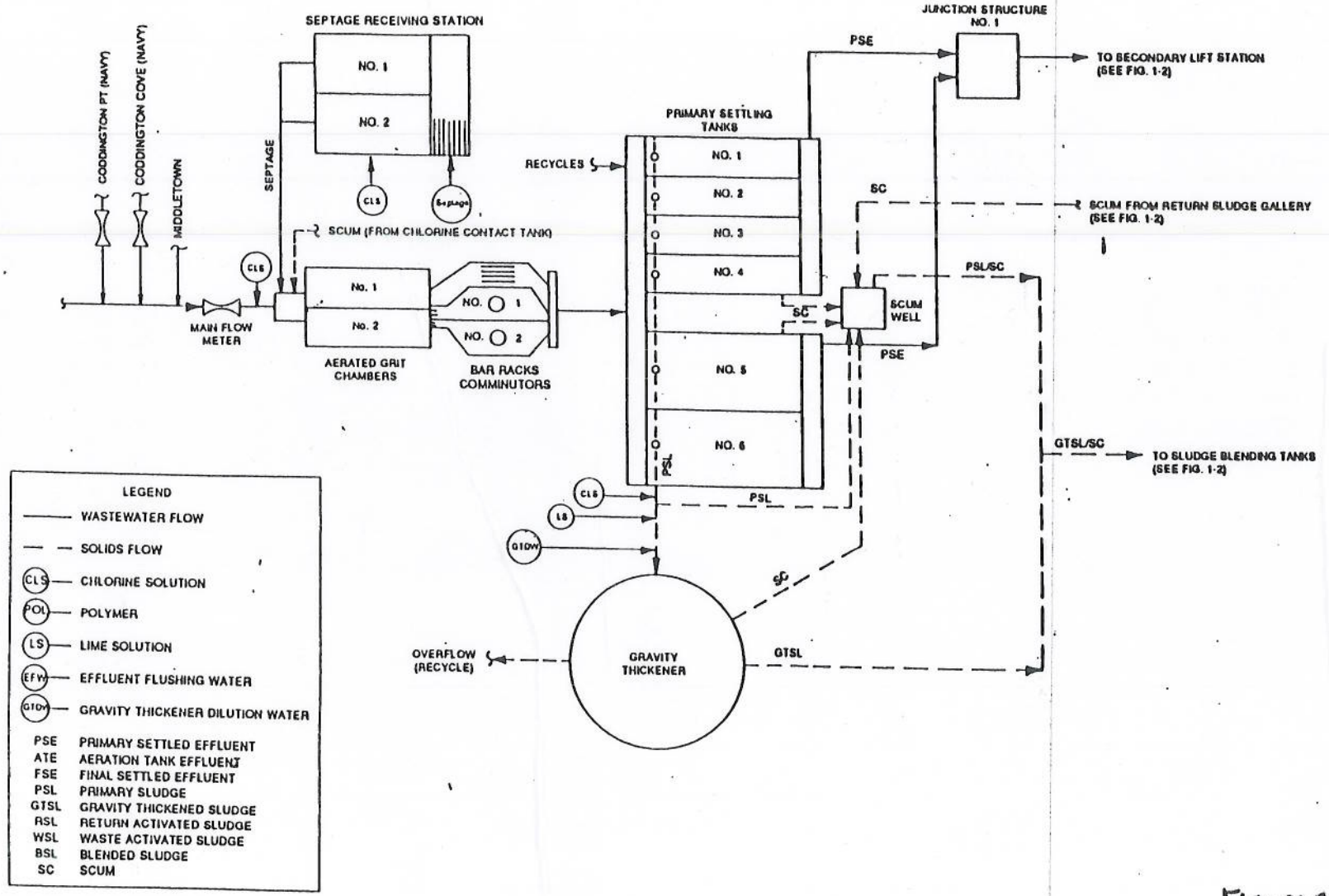


Figure 1. BASIC FLOW DIAGRAM I
PRELIMINARY AND PRIMARY TREATMENT

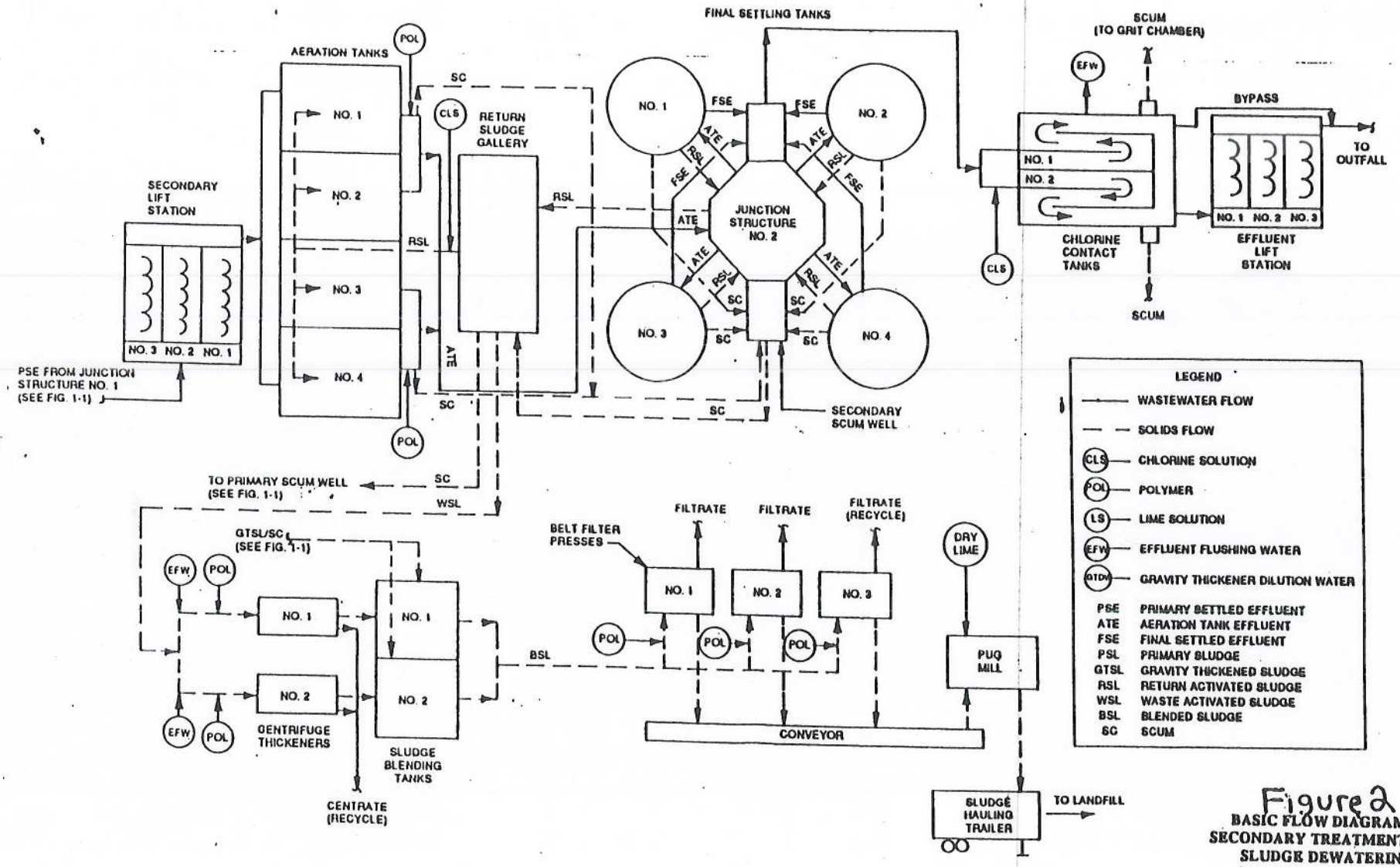
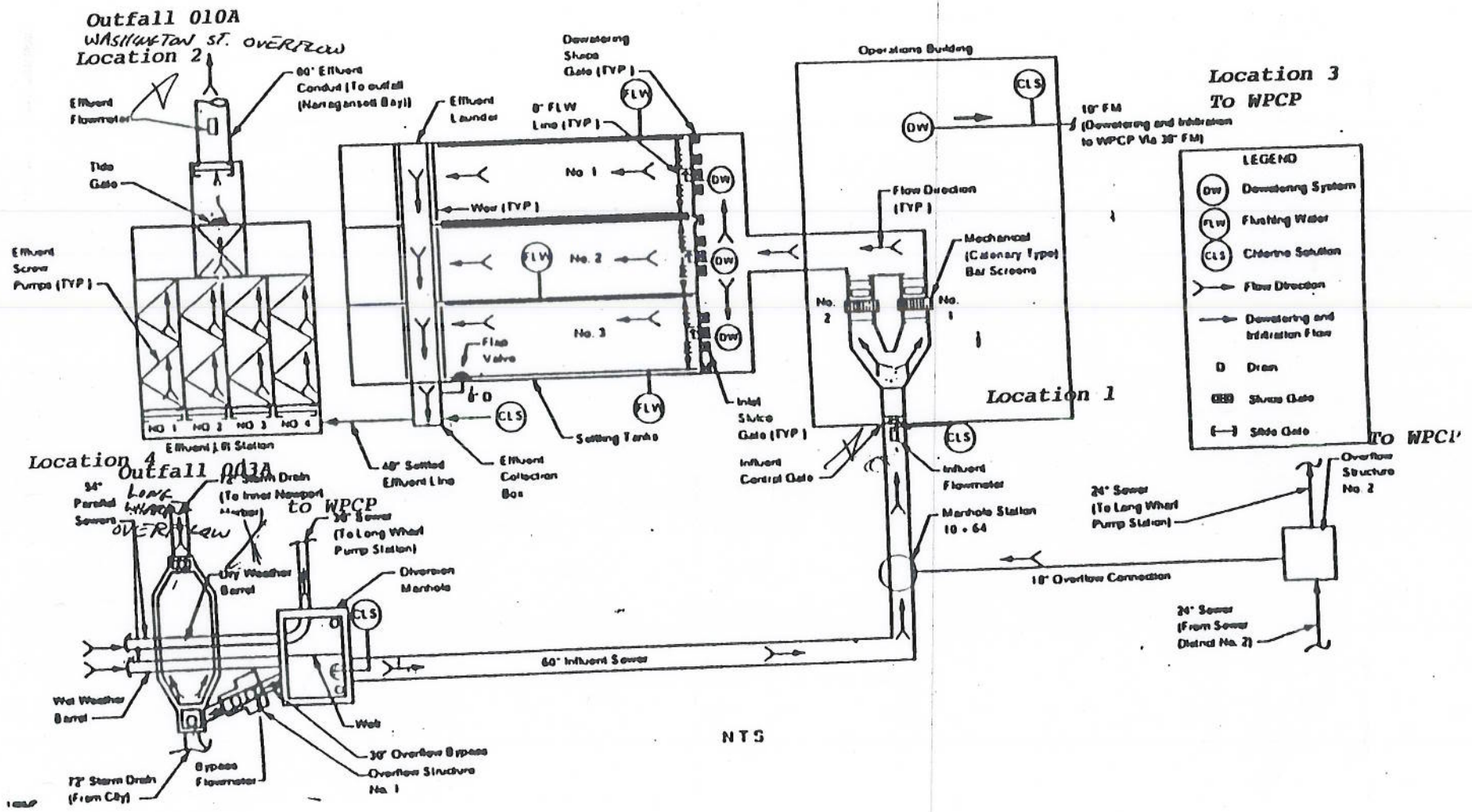


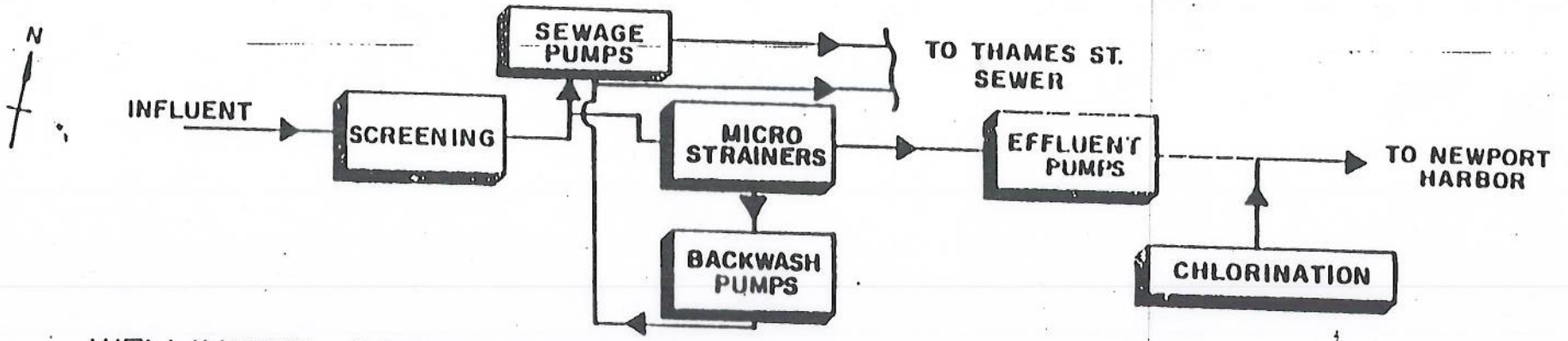
Figure 2

BASIC FLOW DIAGRAM II
SECONDARY TREATMENT AND
SLUDGE DEWATERING



Source: Metcalf and Eddy

Figure 3. Washington Street CSO Facility



WELLINGTON AVENUE PUMPING STATION & MICROSTRAINING FACILITY

SCHEMATIC

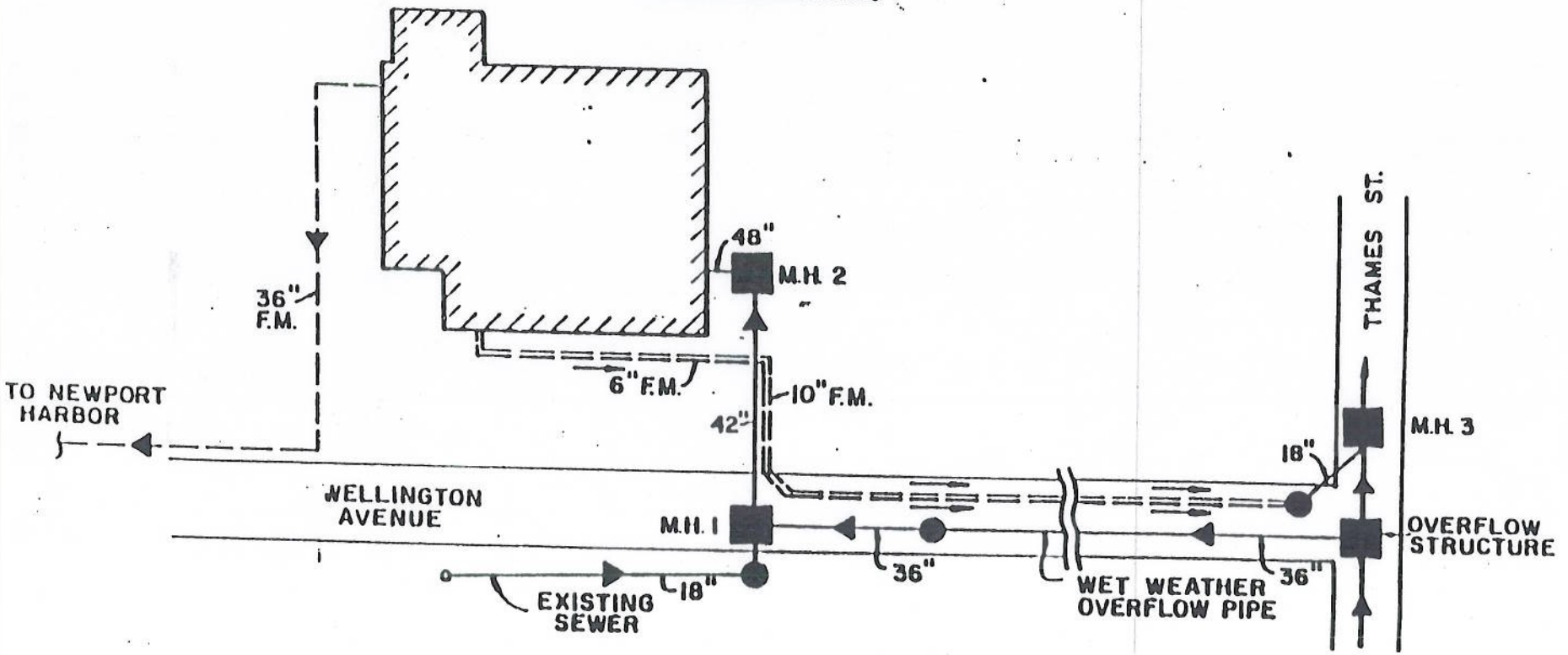


Figure 4. Wellington Avenue Microstraining Facility

Source: Keyes Associates

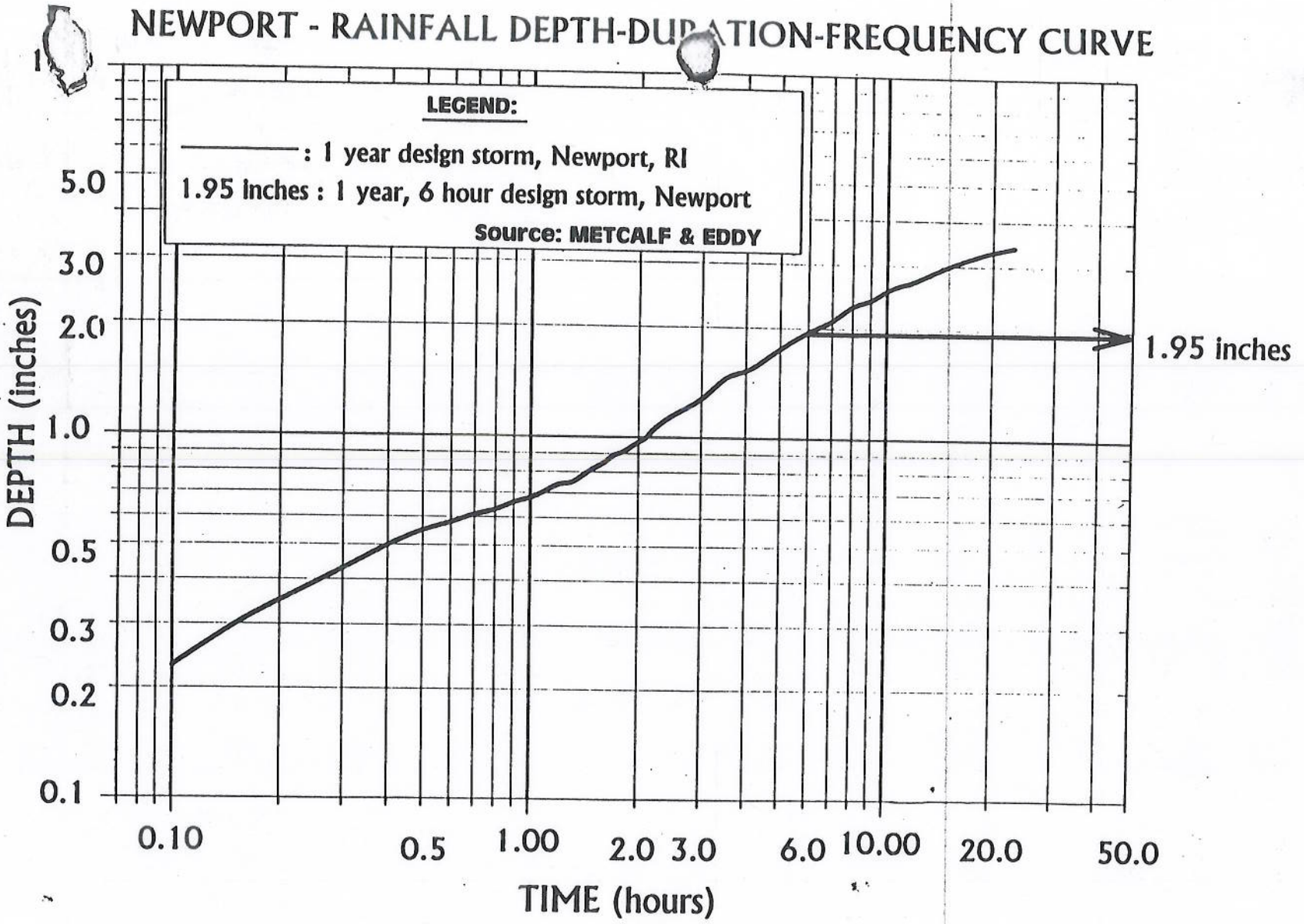


Figure 5. One year rainfall depth-duration-frequency relationship for Newport, Rhode Island. Flows generated by a rain event which is more frequently occurring than the Newport one year, six hour storm and have a total depth less than 1.95 inches are subject to the limitations and requirements contained in the RIPDES Permit. If when the depth and duration of a storm are plotted, the corresponding point on the graph falls below the one year design storm curve, then the storm is more frequently occurring.

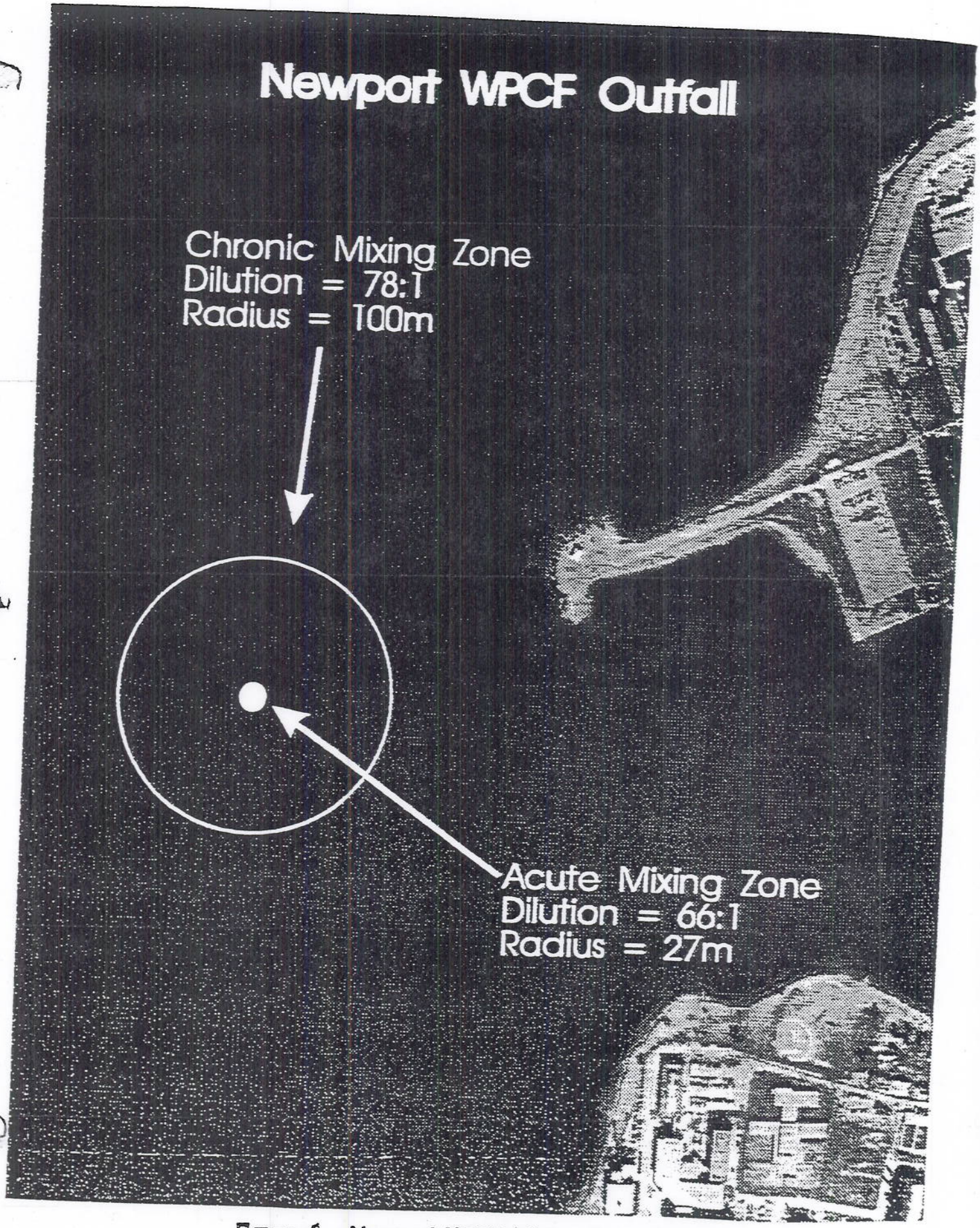


Figure 6 - Newport WPCF Mixing Zone Diagram