

PRETREATMENT PROGRAM  
**ANNUAL REPORT**

JANUARY 1, 2012 - DECEMBER 31, 2012



**ATTACHMENT VOLUME I**  
**NBC AND PRETREATMENT PROGRAM**  
**SPECIFIC INFORMATION**

***ATTACHMENT VOLUME I***

***SECTION 1***

***NBC PUBLIC INFORMATION,  
MAILINGS, NEWSPAPER ARTICLES,  
AND ADVERTISEMENTS***

***INFORMATIONAL LETTERS TO  
USERS***

March 1, 2012



## PERFECT COMPLIANCE

**Mass Mailing  
All SIUs - Both Districts  
List Attached**

Dear :

As you may be aware the Narragansett Bay Commission (NBC) Pretreatment staff reviews the files of all Significant Industrial Users (SIUs) as a part of the Pretreatment Annual Report preparation. As a part of this review, a list of SIUs achieving perfect compliance is compiled. These companies did not receive any Notices of Violation during the review period. In 2011, 19 SIUs achieved perfect compliance with the NBC Rules and Regulations and their permits. These companies are to be commended for their hard work and efforts to maintain compliance. I would like to take this opportunity to congratulate the following companies:

A. Harrison & Company, Inc.	Metallurgical Solutions, Inc.
A.T. Cross Company	Osram Sylvania Products, Inc.
AG&G Incorporated	Providence Journal Company - Production Facility
Callico Metals, Inc. d/b/a Oster Pewter	Providence Metallizing Company, Inc.
Darlene Group	Stackbin Corporation
Electrolizing, Inc.	Tanury Industries PVD, Inc.
Fujifilm Electronic Materials USA, Inc.	Technodic, Inc.
Hord Crystal Corporation	Umicore USA, Incorporated
Impco, Inc.	Vital Diagnostics, Inc.
Materion Technical Materials, Inc.	

An advertisement recognizing the achievements of these companies was published in the Providence Journal on February 24, 2012. Below is a copy of the advertisement for your reference.

Sincerely,

Kerry M. Britt  
Pretreatment Manager

KMB:smb

**NARRAGANSETT BAY COMMISSION**  
**Perfect Compliance**  
*in recognition of Significant Industrial User Perfect Compliance in 2011*

**The Narragansett Bay Commission recognizes these Significant Industrial User companies for perfect regulatory compliance with Pretreatment Program regulations during 2011:**

A. Harrison & Company, Inc.	A.T. Cross Company
AG&G Incorporated	Callico Metals, Inc. dba Oster Pewter
Darlene Group	Electrolizing, Inc.
Fujifilm Electronic Materials USA, Inc.	Hord Crystal Corporation
Impco, Inc.	Materion Technical Materials, Inc.
Metallurgical Solutions, Inc.	Osram Sylvania Products, Inc.
Providence Journal Company - Production Facility	Providence Metallizing Company, Inc.
Tanury Industries PVD, Inc.	Stackbin Corporation
Umicore USA, Incorporated	Technodic, Inc.
	Vital Diagnostics, Inc.

**Has your company demonstrated extraordinary environmental efforts this year?** If so, apply for an NBC Environmental Merit Award! Download an application form at [www.narrabay.com](http://www.narrabay.com).

Vincent J. Mesolella, *Chairman* • Raymond J. Marshall, P.E., *Executive Director*  
One Service Road, Providence, RI 02906 401-461-8848 • [www.narrabay.com](http://www.narrabay.com)

March 7, 2012



**MASS MAILING ALL SIUs  
Field's Point and Bucklin Point  
List Attached**

Dear :

The R. I. DEM requires the Narragansett Bay Commission (NBC), prior to submission of its Annual Pretreatment Report, to notify all significant industrial users annually if their firm was classified as a Significant Industrial User (SIU) during that report year. Therefore, this letter is to notify you that your firm was classified as a SIU during 2011, since one or more of the following criteria applied to your firm:

1. Firm is subject to Federal EPA categorical standards;
2. Firm discharges an average process waste stream of 5,000 gallons per day (0.005 MGD) or more;
3. Firm contributes a process waste stream which is 5% or more of the average dry weather hydraulic or organic capacity of the NBC treatment facility to which the firm discharges;
4. Firm has reasonable potential to adversely affect the POTW's operation, or has the potential for violating any pretreatment standard or requirement.

In accordance with EPA and NBC regulations and the terms of NBC Wastewater Discharge Permits, SIUs must comply with various site specific requirements and must also comply with the EPA reporting requirements outlined in 40 CFR part 403.12. Site specific requirements may include (1) development, implementation, and maintenance of Toxic Organic Solvent Management and Spill & Slug Prevention Control Plans, (2) monitoring of process effluent, and (3) maintenance of logbooks, manifests, and associated paperwork. Reporting requirements may include (1) immediate notification of any spill or slug discharge, (2) twenty-four hour notification of any effluent violation, (3) submission of effluent monitoring reports within thirty days from the end of the month in which monitoring is required, or within thirty days from the sampling date, (4) submission of properly completed and signed Self-Monitoring Compliance Reports with each wastewater analysis, (5) notification of any changes in operation, and (6) submission of any other document by the NBC specified date.

Please refer to your discharge permit to ensure that you are in full compliance with the specific aforementioned requirements that apply to your facility. I recommend that you have regular meetings with all levels of employees at your firm to discuss the environmental regulations and your specific permit requirements and to develop ways to maintain full compliance. I recommend that you form Employee Awareness Programs, since so often your existing employees with the "hands on" responsibilities may see a better way to produce your product or to achieve and maintain compliance. I also encourage your firm to develop Environmental Management Systems (EMS) to provide your firm the environmental focus needed to ensure compliance with today's complex environmental regulations and issues. Avoiding non-compliance is a hard job requiring the participation of every employee from the hourly worker to the owner or CEO. The hard work of all employees is necessary to ensure that the name of your firm is never published in the annual Public Notice in the Providence Journal for being in Significant Non-Compliance (SNC) with NBC and EPA regulations.

The NBC Environmental, Safety & Technical Assistance (ESTA) Program is available to assist you with pollution prevention measures to help your firm achieve and maintain full compliance with environmental regulations. This technical assistance program is free and confidential. Contact Mr. James McCaughey, P.E., at 461-8848, ext. 352 to find out more about the NBC ESTA Program.

The NBC wishes you well at your efforts to comply with the NBC and EPA regulations throughout 2012. If you have any questions regarding this letter or the NBC Pretreatment Program in general, feel free to contact the engineer or technician responsible for regulating your firm at 461-8848, ext. 490.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kerry M. Britt".

Kerry M. Britt  
Pretreatment Manager

KMB:smb

cc: Pretreatment Engineers/Technicians

March 7, 2012



**MASS MAILING  
2011 SNC VIOLATORS LETTER AND INVOICE  
LIST ATTACHED**

Dear «Title» «LastName»:

The Narragansett Bay Commission (NBC) is required by the EPA to publish annually the names of all firms in Significant Non-Compliance (SNC). As you may know, the name of your firm was published in the Providence Journal on February 24, 2012 as being in SNC with NBC or EPA regulations for the reporting period of October 1, 2010 through December 31, 2011. A copy of the Public Notice is enclosed for your information. The publication of your firm's name should have come as no surprise to you since a form letter dated March 11, 2011 was sent to all users explaining the NBC regulations, the SNC review criteria, and the consequences for non-compliance. In addition, your firm was notified by Notice of Violation citing each non-compliance event at the time the violation occurred, notifying you of the fact the name of your firm may be published for being in SNC.

Enclosed please find an invoice in the amount of \$520.00 for your share of the cost of the public notice. Your check must be made payable to the **Narragansett Bay Commission** and mailed to **the Pretreatment Section, 2 Ernest Street, Providence, RI 02905, no later than April 6, 2012. (Please do not send check to customer service with your pretreatment fee or consumption payment as this will result in billing errors.)**

Thank you for your anticipated prompt payment, and I urge you to comply with all your permit requirements and NBC/EPA regulations so that the NBC will not have to publish the name of your firm in the future. The NBC Environmental Safety & Technical Assistance (ESTA) Section is available to provide free technical assistance to your firm. To take advantage of the free NBC Pollution Prevention program, contact Mr. James McCaughey at 461-8848, ext. 352.

Sincerely,

Kerry M. Britt  
Pretreatment Manager

KMB:sm

Enclosures

cc: Mario Martone, Esq. – Legal  
Clara Casimiro - Customer Service



**INVOICE DATE:** 03/7/12

**DUE DATE:** 04/6/12

**BILL TO:**

**ATTENTION:** «TITLE» «FIRSTNAME» «LASTNAME»  
**COMPANY NAME:** «Company»

**BILLING ADDRESS:** «Address1», «City», «State» «PostalCode»

DATE	DESCRIPTION	TOTAL
March 7, 2012	Reimbursement for Significant Non-Compliance Public Notice published February 24, 2012	\$520.00
	<b>Total Amount Due</b>	<b>\$520.00</b>

**Please Make Checks Payable To:**



The Narragansett Bay Commission  
Pretreatment Section  
2 Ernest Street  
Providence, RI 02905-5502

PLEASE DETACH THIS STUB AND  
RETURN WITH YOUR CHECK OR  
MONEY ORDER

Please Deposit Into Pretreatment Account Only		
*Reimbursement SNC Public Notice Ad published 02/24/12		
Due Date	Total Amount Due	Amount Enclosed
04/6/12	\$520.00*	

**COMPANY NAME:** «Company»  
**BILLING ADDRESS:** «Address1», «City», «State» «PostalCode»





# PUBLIC NOTICE

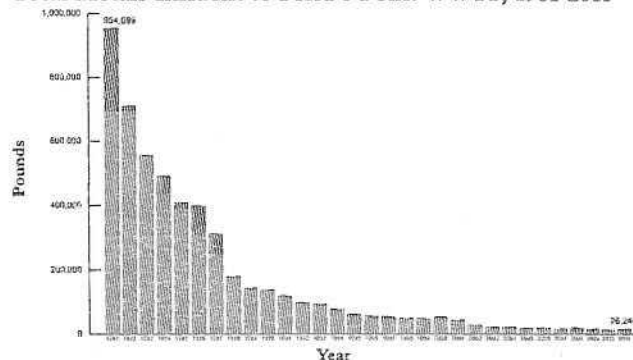
## Firms in Significant Non-Compliance

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 C.F.R. 403.8(f) (2) (vi) and Article 10 of the Narragansett Bay Commission, Rules and Regulations require the NBC to publish annually the names of all industrial users in Significant Non-Compliance (SNC) with pretreatment standards and other pretreatment requirements during the preceding year. Companies deemed to be in Significant Non-Compliance are those industrial users who have violated any of the Significant Non-Compliance criteria listed, as defined by Article 2 of the NBC Rules and Regulations during the time period from October 1, 2009 through December 31, 2010. The parameter for which a company was not in compliance and/or the specific administrative deficiency are listed after the company name. The number(s) in parentheses correspond to the type of SNC criteria specified below. Some of the firms listed below may have been issued an Administrative Order in which administrative and/or civil penalties may have been assessed. Many of the companies listed have made significant progress toward correcting the violation and may now be in compliance.

**Significant Non-Compliance Criteria:**

- (1) Chronic violations of wastewater discharge limits, defined here as those in which 66% or more of all of the measurements taken during a six-month period exceed (by any magnitude) a numerical Pretreatment Standard or Requirement for the same pollutant parameter;
- (2) Technical Review Criteria (TRC) violations, defined here as those in which 33% or more of all the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of a numerical Pretreatment Standard or Requirement multiplied by the applicable TRC value (TRC = 1.4 for BOD, TSS, fats, oil, and grease and 1.2 for all other pollutants except pH);
- (3) Any other violation of a pretreatment effluent limit (daily maximum or long-term average) that the Commission determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of Commission personnel or the general public);
- (4) Any discharges of a pollutant that has caused imminent endangerment to human health, welfare or the environment or has resulted in the Commission's exercise of its emergency authority to halt or prevent such a discharge;
- (5) Failure to meet, within 90 days after the scheduled date, a compliance milestone contained in a Commission notification, permit or enforcement order, for starting construction, completing construction or attaining final compliance;
- (6) Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, self-monitoring compliance reports and reports on compliance with compliance schedules;
- (7) Failure to accurately report noncompliance;
- (8) Any other violation or group of violations which the Commission determines has adversely affected the operation or implementation of the Industrial Pretreatment Program.

**Total Metals Influent to Field's Point WWTF, 1981-2011**



THE NARRAGANSETT BAY COMMISSION IS COMMITTED TO PROTECTING THE STATE'S TWO LARGEST WASTEWATER TREATMENT FACILITIES AND NARRAGANSETT BAY FROM TOXIC DISCHARGES. This is accomplished by the issuance of discharge permits to commercial and industrial sewer users. These discharge permits specify the level of pollutants that can be discharged in a facility's wastewater and may require a firm to conduct wastewater monitoring to verify compliance with discharge limits, to implement a Spill Control Plan and/or Toxic Organic/Solvent Management Plan, and to install pretreatment equipment. Various reporting and record keeping requirements may also be written into discharge permits. The firms listed in this public notice violated one or more of the significant non-compliance criteria specified above. The Commission is required by the RI DEM and the US EPA to annually publish the names of all firms violating any of these criteria. Therefore, firms must be sure to comply with all the terms specified in their discharge permit to ensure that the name of their firm is not listed in this annual public notice. The NBC offers FREE technical assistance to firms located in the NBC service area through its non-regulatory Office of Environmental, Safety & Technical Assistance. For information on how the NBC Environmental, Safety & Technical Assistance Program can help your firm achieve and maintain compliance, contact the Environmental, Safety & Technical Assistance Program Staff at 461-8848/TDD 461-6549.

Most businesses located in the NBC district are to be commended for the fine job they have done treating their process discharges to remove toxic pollutants. In 1981, local industries discharged 954,099 pounds of heavy metals such as copper, nickel and zinc and 80,440 pounds of cyanide to the Field's Point Wastewater Treatment Facility. Since 1981, the total metals and cyanide loadings to the Field's Point facility have been reduced by 97.2% and 98.2% respectively. Similar toxic loading reductions have been observed at the NBC Bucklin Point facility.

**Bucklin Point Service Area**

East Providence		
Company Name	Violations Cited	Present Status
Aspen Aerogels Rhode Island, LLC	Failure to submit reports on time (6)	Reports have been received.
Cumberland		
Ronald Pratt Company, Inc.	Cu (2)	Firm is now in compliance.

**Field's Point Service Area**

Providence		
Company Name	Violations Cited	Present Status
Precision Industries, Inc.	Failure to submit reports on time (6)	Reports have been received.
Cristoloid, Inc.	Failure to submit report on time (6)	Report has been received.
North Providence		
Alpha Plating & Metallizing	Failure to submit reports on time (6)	Reports have been received. Firm is now out of business.

The Narragansett Bay Commission will continue to be a leader in the field of wastewater treatment, environmental protection, and environmental education to ensure a cleaner Narragansett Bay for all to enjoy.

Vincent J. Mesolella, *Chairman* • Raymond J. Marshall, P.E., *Executive Director*  
 Narragansett Bay Commission • One Service Road • Providence, RI 02905  
 401-461-8848 • TDD 401-461-6549 • FAX 401-461-6540 • <http://www.narrabay.com>  
 Twitter: @narrabay • Facebook: [www.facebook.com/narrabay](http://www.facebook.com/narrabay)

The cost of this public notice will be billed to the firms listed above that were in significant non-compliance.

March 21, 2012



## **MASS MAILING**

**Categories 11 through 59 - Both Districts  
List Attached**

Dear \_\_\_\_\_ :

This informational form letter is being sent to all industrial firms regulated by the Narragansett Bay Commission (NBC) Pretreatment Program to educate our users about EPA Regulations regarding Significant Non-Compliance. Federal general pretreatment program regulations require the NBC to annually publish a list of all industrial users that violate any of the EPA Significant Non-Compliance Criteria listed below:

### **SIGNIFICANT NON-COMPLIANCE CRITERIA**

- A. Chronic violations of wastewater discharge limits, defined here as those in which 66% or more of all of the measurements taken during a six-month period exceed (by any magnitude) a numerical Pretreatment Standard or Requirement for the same pollutant parameter;
- B. Technical Review Criteria (TRC) violations, defined here as those in which 33% or more of all the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of a numerical Pretreatment Standard or Requirement multiplied by the applicable TRC value (TRC = 1.4 for BOD, TSS, fats, oil, and grease and 1.2 for all other pollutants except pH);
- C. Any other violation of a pretreatment effluent limit (daily maximum or long-term average) that the Commission determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of Commission personnel or the general public);
- D. Any discharges of a pollutant that has caused imminent endangerment to human health, welfare or the environment or has resulted in the Commission's exercise of its emergency authority to halt or prevent such a discharge;

- E. Failure to meet, within 90 days after the scheduled date, a compliance milestone contained in a Commission notification, permit or enforcement order, for starting construction, completing construction or attaining final compliance;
- F. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, self-monitoring compliance reports and reports on compliance with compliance schedules;
- G. Failure to accurately report non-compliance;
- H. Any other violation or group of violations which the Commission determines has adversely effected the operation or implementation of the Pretreatment Program.

The EPA requires that the NBC must review each industrial user file every three (3) months for SNC criteria A and B referenced above, evaluating the user's previous six (6) month compliance status as can be seen from the enclosed EPA graphic. **If an industrial user exceeds the compliance percentages specified in the SNC criteria A or B, even for just one quarterly evaluation period, the user is in significant non-compliance and must be listed in the newspaper.** The compliance percentages specified in SNC criteria A and B are calculated for each sample location specified in your Wastewater Discharge Permit. The NBC still reviews each user file annually to determine the user's compliance status with EPA criteria C through H. This EPA data evaluation method clearly shows how important it is for an industrial user to sample early and often during each quarterly data review period, especially for any parameters which your firm may periodically experience excursions above the discharge limits. Sampling early and often each quarterly review period will ensure that you are not listed as a violator for criteria A and B.

**SUBMIT ALL REPORTS BY THE DUE DATE SPECIFIED BY THE NBC.** The name of your firm will automatically be published in the newspaper as being in SNC for criteria F if any NBC requirement is not satisfied within thirty (30) days of the due date. Notify the NBC within twenty-four (24) hours of becoming aware of any sampling violation and immediately begin to resample for any parameters in violation (except for BOD and TSS). This is required by your discharge permit and is clearly stated on the Self-Monitoring Compliance Report form that must accompany each analyses. Please do not hesitate to contact the NBC Environmental, Safety & Technical Assistance (ESTA) Section if your firm is experiencing compliance problems and would like assistance with pollution prevention measures. The NBC ESTA staff is available to provide FREE technical assistance to your firm. For information regarding how pollution prevention assistance can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848, ext. 352.

PLEASE NOTE THAT THE NBC DOES NOT WANT TO PUBLISH THE NAME OF ANY FIRM, BUT WE MAY HAVE NO CHOICE. On February 24, 2012, the names of five (5) firms from both districts were published in an advertisement in the Providence Journal due to their SNC status. These firms were billed by the NBC for the reimbursement cost for this public notice. A copy of this public notice is enclosed for your information. Firms published in the 2013 annual public notice will also be billed by the NBC for the cost of the advertisement. Only you can ensure that the name of your firm is not published for being in Significant Non-Compliance with NBC and EPA regulations. Please feel free to contact the ESTA staff if the NBC can be of assistance with your compliance endeavors. Good luck maintaining full compliance during 2012.

If you should have any questions regarding this letter or the permit requirements specific to your facility, contact the engineer or technician that regulates your firm at 461-8848, ext. 490.

Sincerely,



Kerry M. Britt  
Pretreatment Manager

KMB:smb

Enclosures

cc: Pretreatment Engineers and Technicians



## SIGNIFICANT NON-COMPLIANCE CRITERIA

- (a) Chronic Violations of Wastewater discharge limits, defined here as those in which 66% or more of all of the measurements taken during a six (6) month period exceed (by any magnitude) a numerical Pretreatment Standard or Requirement for the sample pollutant parameter;
- (b) Technical Review Criteria (TRC) violations, defined here as those in which 33% or more of all measurements for each pollutant parameter taken during a six (6) month period equal or exceed the product of a numerical Pretreatment Standard or Requirement multiplied by the applicable TRC (TRC = 1.4 for oil and grease and 1.2 for all other pollutants except pH);
- (c) Any other violation of a pretreatment effluent limit (daily maximum or long-term average) that the Narragansett Bay Commission (NBC) determines has caused, alone or in combination with other discharges, interference or pass through, including endangering the health of NBC personnel or the general public;
- (d) Any discharges of a pollutant that has caused imminent endangerment to human health, welfare of the environment or has resulted in the NBC's exercise of its emergency authority to halt or prevent such a discharge;
- (e) Failure to meet, within ninety (90) days after the scheduled date, a compliance milestone contained in a permit or enforcement order for completing construction or attaining final compliance;
- (f) Failure to provide, within thirty (30) days after the due date, required reports such as baseline monitoring reports, ninety (90) day compliance reports, Self-Monitoring Compliance Reports, and reports on compliance with compliance schedules;
- (g) Failure to accurately report noncompliance;
- (h) Any other violation or group of violations which the NBC determines will adversely affect the operation or implementation of the Pretreatment Program.

## EXPLANATION OF SIGNIFICANT NON-COMPLIANCE (SNC) CRITERIA

**SNC Criteria A** 66 % or more of measurements are in violation of effluent standards for any six (6) month review period.

**Example:** Firm samples for copper ten (10) times in the six (6) month evaluation period of January 1 through June 30. Copper results are as follows:

(1)	1.16 ppm	-	In Compliance	(6)	1.21 ppm	-	Violation
(2)	2.34 ppm	-	Violation	(7)	4.35 ppm	-	Violation
(3)	1.26 ppm	-	Violation	(8)	1.40 ppm	-	Violation
(4)	2.31 ppm	-	Violation	(9)	2.17 ppm	-	Violation
(5)	0.87 ppm	-	In Compliance	(10)	0.91 ppm	-	In Compliance

The discharge limit for copper is 1.20 ppm, 7 out of 10 samples exceed this limit, therefore 70% of the copper samples are in violation, resulting in the firm being in SNC for copper for Criteria A.

**SNC Criteria B** Technical Review Criteria - 33% or more of measurements for the six (6) month review period exceed the limit multiplied by the TRC value. The TRC value = 1.2 for all parameters except oil and grease, where the TRC = 1.4

**Example:** For copper the TRC value multiplied by the copper limit =  $1.2 \times 1.2 = 1.44$ . Using the same results for copper as given in the example above:

<u>Measurements</u>	<u>Copper TRC Limit</u>	<u>In Compliance With TRC Limit?</u>
(1) 1.16 ppm	1.44 ppm	Yes
(2) 2.34 ppm	1.44 ppm	No
(3) 1.26 ppm	1.44 ppm	Yes
(4) 2.31 ppm	1.44 ppm	No
(5) 0.87 ppm	1.44 ppm	Yes
(6) 1.21 ppm	1.44 ppm	Yes
(7) 4.35 ppm	1.44 ppm	No
(8) 1.40 ppm	1.44 ppm	Yes
(9) 2.17 ppm	1.44 ppm	No
(10) 0.91 ppm	1.44 ppm	Yes

The TRC limit for copper, 1.44 is exceeded four (4) out of ten (10) samples in the review period, therefore, 40% exceedence of the TRC limit occurred, resulting in the firm being in SNC for Criteria B.

**SNC Criteria C** Any violation of a pretreatment effluent limit that has caused interference or pass-through of NBC facilities.

**Example:** A firm dumps an electroplating tank containing copper and cyanide. These toxic chemicals kill the microorganism at the NBC Wastewater Treatment facility, interfering with NBC operations. The firm is in SNC for Criteria C.

**Example:** A firm discharges a concentrated red dye containing copper. The red color passes through the NBC Wastewater Treatment facility, discoloring the receiving waters of Narragansett Bay. The firm is in SNC for Criteria C.

**SNC Criteria D** Discharging a pollutant that has caused imminent endangerment to human health or the environment.

**Example:** A firm dumps a degreasing solvent such as trichloroethylene into the sewer. Toxic chemical odors are evolved and enter nearby homes, businesses and endangers sewer workers. The firm is in SNC for Criteria D.

**Example:** An automotive repair facility dumps gasoline into the sewer creating toxic odors and explosive conditions in the sewer system. The firm is in SNC for criteria D.

**SNC Criteria E** Failure to meet, within ninety (90) days after a scheduled completion date, a compliance milestone...

**Example:** The firm, required by a compliance order, compliance schedule, permit or other document, fails to achieve a compliance milestone such as installing a pretreatment system, by the required date and exceeds the compliance milestone deadline by more than ninety (90) days. The firm is in SNC for Criteria E.

**SNC Criteria F** Failure to submit documents within thirty (30) days from the due date.

**Example:** A firm is required to sample in May and the compliance report is due by June 30. The report is submitted to the NBC on July 31, thirty one (31) days past the due date, therefore the firm is in SNC for Criteria F.

**SNC Criteria G** Failure to accurately report non-compliance.

**Example:** A firm is required to continuously record the pH of their effluent and to report the results monthly to the NBC on a monitoring report form. During the annual NBC inspection of the firm, the pH charts are reviewed and it is determined that low and high effluent pH violations have not been reported. The firm is in SNC for Criteria G and could face additional enforcement action for falsification of monitoring reports.

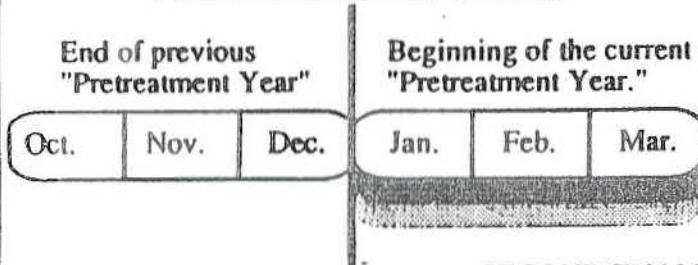
**SNC Criteria H** Any violation that adversely effects the operation or implementation of the pretreatment program.

**Example:** A firm refuses to allow access to NBC inspectors or harasses the NBC inspectors while performing their duties. The firm would be in SNC for Criteria H.

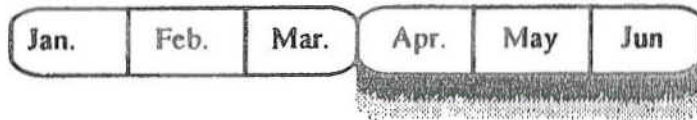
# Determination of Industrial User (IU) Significant Noncompliance (SNC)

1. The POTW (in conjunction with the Approval Authority) must establish its "Pretreatment Year."
2. At the end of each quarter, POTWs and States should evaluate their IU's compliance status for the two criteria which are evaluated on a six month time frame (i.e., the "A" and "B" criteria - 403.8(f)(2)(vii)(A) and (B)) as illustrated below. The example below assumes a "Pretreatment Year" equal to the calendar year.

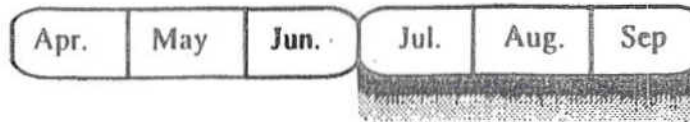
## FIRST EVALUATION PERIOD



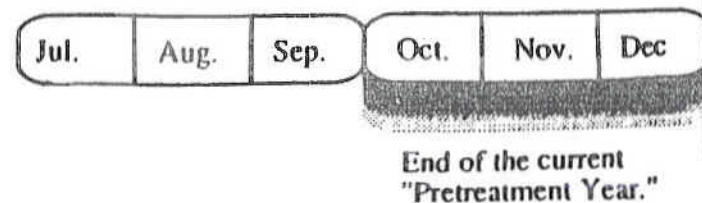
## SECOND EVALUATION PERIOD



## THIRD EVALUATION PERIOD



## FOURTH EVALUATION PERIOD



3. At the end of the first quarter (March 30th in our example), the POTW must evaluate the data from an industrial user for the previous six months (e.g., beginning with October 1 of the previous "Pretreatment Year" as in our example). Likewise, the POTW must evaluate six months of data at the end of each subsequent quarter (e.g., June 30th, September 30th, and December 31st).
4. At the end of the "Pretreatment Year," the POTW must summarize the compliance status of its industrial users over the reporting period and report on this compliance status to the Approval Authority. The POTW must publish all industrial users which were identified in SNC during the "Pretreatment Year," unless the IU was previously published for violations which occurred solely in the last quarter of the previous "Year."



The Narragansett Bay Commission

# PUBLIC NOTICE

## Firms in Significant Non-Compliance



THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 CFR 403.8(f) (2) (vi) and Article 10 of the Narragansett Bay Commission, Rules and Regulations require the NBC to publish annually the names of all industrial users in Significant Non-Compliance (SNC) with pretreatment standards and other pretreatment requirements during the preceding year. Companies deemed to be in Significant Non-Compliance are those industrial users who have violated any of the Significant Non-Compliance criteria listed, as defined by Article 2 of the NBC Rules and Regulations during the time period from October 1, 2010 through December 31, 2011. The parameter for which a company was not in compliance and/or the specific administrative deficiency are listed after the company name. The number(s) in parentheses correspond to the type of SNC criteria specified below. Some of the firms listed below may have been issued an Administrative Order in which administrative and/or civil penalties may have been assessed. Many of the companies listed have made significant progress toward correcting the violation and may now be in compliance.

**Significant Non-Compliance Criteria:**

- (1) Chronic violations of wastewater discharge limits, defined here as those in which 60% or more of all the measurements taken during a six-month period exceed (by any magnitude) a numerical Pretreatment Standard or Requirement for the same pollutant parameter;
- (2) Technical Review Criteria (TRC) violations, defined here as those in which 33% or more of all the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of a numerical Pretreatment Standard or Requirement multiplied by the applicable TRC value (TRC = 1.4 for BOD, TSS, fats, oil, and grease and 1.2 for all other pollutants except pH);
- (3) Any other violation of a pretreatment effluent limit (daily maximum or long term average) that the Commission determines has caused alone or in combination with other discharges, interference or pass through (including endangering the health of Commission personnel or the general public);
- (4) Any discharges of a pollutant that has caused imminent endangerment to human health, welfare or the environment or has resulted in the Commission's exercise of its emergency authority to halt or prevent such a discharge;
- (5) Failure to meet, within 90 days after the scheduled date, a compliance milestone contained in a Commission notification, permit or enforcement order, for starting construction, completing construction or attaining final compliance;
- (6) Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, self-monitoring compliance reports and reports on compliance with compliance schedules;
- (7) Failure to accurately report non-compliance;
- (8) Any other violation or group of violations which the Commission determines has adversely effected the operation or implementation of the Industrial Pretreatment Program.

THE NARRAGANSETT BAY COMMISSION IS COMMITTED TO PROTECTING THE STATE'S TWO LARGEST WASTEWATER TREATMENT FACILITIES AND NARRAGANSETT BAY FROM TOXIC DISCHARGES. This is accomplished by the issuance of discharge permits to commercial and industrial sewer users. These discharge permits specify the level of pollutants that can be discharged in a facility's wastestream and may require a firm to conduct wastewater monitoring to verify compliance with discharge limits, to implement a Spill Control Plan and/or Toxic Organic/Solvent Management Plan, and to install pretreatment equipment. Various reporting and record keeping requirements may also be written into discharge permits. The firms listed in this public notice violated one or more of the significant non-compliance criteria specified above. The Commission is required by the RI DEM and the US EPA to annually publish the names of all firms violating any of these criteria. Therefore, firms must be sure to comply with all the terms specified in their discharge permit to ensure that the name of their firm is not listed in this annual public notice. The NBC offers FREE technical assistance to firms located in the NBC service area through its non-regulatory Office of Environmental, Safety & Technical Assistance. For information on how the NBC Environmental, Safety & Technical Assistance Program can help your firm achieve and maintain compliance, contact the Environmental, Safety & Technical Assistance Program Staff at 401-8648/TDD 401-6549.

Most businesses located in the NBC district are to be commended for the fine job they have done treating their process discharges to remove toxic pollutants. In 1981, local industries discharged 954,099 pounds of heavy metals such as copper, nickel and zinc and 80,440 pounds of cyanide to the Field's Point Wastewater Treatment Facility. Since 1981, the total metals and cyanide loadings to the Field's Point facility have been reduced by 97.2% and 98.2% respectively. Similar toxic loading reductions have been observed at the NBC Bucklin Point facility.

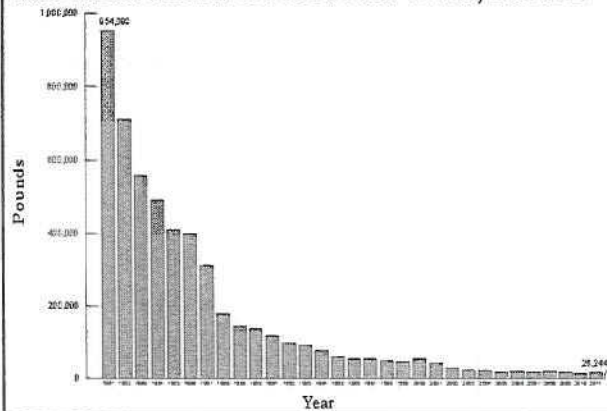
### Bucklin Point Service Area

East Providence		
Company Name	Violations Cited	Present Status
Aspen Aerojet Rhode Island, LLC	Failure to submit reports on time (6)	Reports have been received.
Cumberland		
Ronald Pratt Company, Inc.	Cu (2)	Firm is now in compliance.

### Field's Point Service Area

Providence		
Company Name	Violations Cited	Present Status
Precision Industries, Inc.	Failure to submit reports on time (6)	Reports have been received.
Cataloid, Inc.	Failure to submit report on time (6)	Report has been received.
North Providence		
Alpha Plating & Metalizing	Failure to submit reports on time (6)	Reports have been received Firm is now out of business.

Total Metals Influent to Field's Point WWTF, 1981-2011



The Narragansett Bay Commission will continue to be a leader in the field of wastewater treatment, environmental protection, and environmental education to ensure a cleaner Narragansett Bay for all to enjoy.

Vincent J. Meselella, *Chairman* • Raymond J. Marshall, P.E., *Executive Director*  
Narragansett Bay Commission • One Service Road • Providence, RI 02905  
401-461-8848 • TDD 401-461-6549 • FAX 401-461-6540 • <http://www.narrabay.com>  
Twitter: @narrabay • Facebook: [www.facebook.com/narrabay](http://www.facebook.com/narrabay)

The rest of this public notice will be billed to the firms listed above that were in significant non-compliance.

March 28, 2012



## **ENVIRONMENTAL MERIT AWARDS**

**Mass Mailing - All Users - Both Districts**

**List Attached**

Dear \_\_\_\_\_ :

The Narragansett Bay Commission (NBC) is proud to announce its eighteenth annual NBC Environmental Merit Awards. As you may be aware, each year the NBC honors companies that have gone above and beyond compliance using pollution prevention techniques and approaches, implemented storm water mitigation technologies, and companies that achieved perfect compliance records.

There are three types of Environmental Merit Awards, the Pollution Prevention Award, the Perfect Compliance Award, and the Stormwater Management Award. Companies qualified for a Pollution Prevention Award must be in good standing with the NBC Rules and Regulations and able to demonstrate pollution prevention efforts that have resulted in volume/toxicity reduction of pollutants, commitment to sound environmental management practices, application of pollution prevention efforts for use by other companies, employee participation, extraordinary efforts to go beyond compliance and/or demonstrate innovative approaches to waste management. Companies that are qualified for Stormwater Management Awards must demonstrate stormwater abatement efforts resulting in measurable reduction/elimination of storm flow to the NBC sewer system.

If you would like to nominate your company for an NBC Environmental Merit Award, you can find the application and award criteria on our website using the following link:

[http://www.narrabay.com/News/2012/March/~/\\_/media/Files/PR%20Documents/Env%20Merit%20Awards.ashx](http://www.narrabay.com/News/2012/March/~/_/media/Files/PR%20Documents/Env%20Merit%20Awards.ashx)

Please download the application and return it by April 20, 2012 to:

Jim McCaughey, PE, BCEE,  
Environmental Manager  
The Narragansett Bay Commission  
One Service Road  
Providence, RI 02905  
Email: [jmccaughey@narrabay.com](mailto:jmccaughey@narrabay.com)  
Fax: 401.461-6540

Page 2

If you have any questions, please contact me at 461.8848, ext. 490.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kerry M. Britt".

Kerry M. Britt  
Pretreatment Manager

cc: Jim McCaughey  
John Zuba

June 4, 2012



**MASS MAILING**  
**Summer Shutdown Letter**  
**Both Districts - Categories 11 through 59**  
**List Attached**

Dear \_\_\_\_\_ :

Typically, many industries shutdown their operations for a period of time during the summer months. Past operating experiences in the Narragansett Bay Commission (NBC) Districts have shown that large quantities of toxic and hazardous wastes have been indiscriminately dumped in significant quantities into the sewer system as part of an industry's "clean-up" procedure prior to their summer shutdown. This usually occurs in the last two weeks of June and throughout the month of July.

The two NBC Wastewater Treatment Facilities are secondary treatment facilities which utilize microorganisms to treat sanitary wastewater. These microorganisms work to reduce the amount of conventional pollutants discharged to Narragansett Bay from our treatment facilities. Slug discharges containing industrial pollutants can kill or severely impair the effectiveness of these microorganisms, thus creating a situation that would counter the efforts of the NBC to provide a clean bay for all to enjoy.

We urge all firms to dispose of their spent solutions properly, since it will be far less costly than the fines and legal expenses incurred if caught improperly disposing of these wastes. The NBC will be actively monitoring the sewer system during the upcoming vacation period to detect any illegal discharges. Industries found to be in violation of the NBC Rules and Regulations may be subject to a fine of up to \$25,000 per violation and/or thirty (30) days of imprisonment for criminally negligent violations. Therefore, we ask for your cooperation and request that you contact your chemical supplier or a licensed hazardous waste hauler to properly dispose of your spent concentrated solutions during your upcoming vacation shutdown.

Over the next few weeks in advance of the summer shutdown, the Pretreatment staff will be conducting site visits to every manufacturing facility to remind the waste operators regarding waste disposal requirements and to assist operators regarding their waste treatment and disposal options. This will help to ensure that firms do not experience any compliance problems associated with the vacation facility clean up. For more information regarding the proper disposal of waste from your facility or to report illegal dumping, contact the Pretreatment Program staff at 461-8848, ext. 490. Thank you for your continued cooperation with regard to properly treating all waste and enjoy your summer vacation.

Sincerely

A handwritten signature in cursive script, appearing to read "Kerry M. Britt".

Kerry M. Britt  
Pretreatment Manager

Enclosure

2 Ernest Street • Providence, Rhode Island 02905 • 401 . 461 . 8848 • 401 . 461 . 0170



# Narragansett Bay Commission

## Electroplaters, Metal Finishers, Chemical Processing Firms and Other Industries:

### Vacation Shutdown Prohibited Sewer Discharges

Typically many industries shut down their operation for a period of time during the holiday months. Past operating experiences in the Narragansett Bay Commission (NBC) District have shown that large quantities of toxic and hazardous wastes have been indiscriminately dumped in significant quantities into the sewer as part of an industry's "clean-up" procedure prior to their shutdown. This usually occurs in the last two weeks of June and throughout the month of July, as well as in December. Pursuant to Title 46 Chapter 25 of the Rhode Island General Laws, the NBC has adopted regulations which prohibit the discharge of wastes which could:

- create a fire or explosion (example: solvents such as trichloroethylene, xylene or gasoline);
- cause corrosive damage to our facilities (example: acids or bases);
- hinder the flow or causes obstructions to our facilities (example: fats, waxes, greases, oils, solids);
- result in an excessive hydraulic/pollutant flow rate (example: slug discharge from the dumping of plating or other baths);
- interfere with treatment facility operations (example: dumping cyanide or heavy metal containing solutions) and;
- cause pass through of the wastewater treatment facility (example: dumping of dyes or pigments).

Other wastes are also regulated specifically by type of waste and concentration by the NBC's Rules and Regulations. Copies of these regulations may be obtained at the NBC's Pretreatment office. In addition, it is illegal to discharge any non-sanitary wastewaters into the NBC sewer system prior to being issued a discharge permit. Please dispose of spent solutions properly. It is less costly than being caught illegally disposing of these wastes. Industries found to be in violation of the NBC's Rules and Regulations may be subject to a fine of up to \$25,000 per violation per day and/or up to thirty (30) days of imprisonment. In general, industries located in the NBC service area are to be commended for the fine job to date at reducing toxic discharges to the sewer. In 1981, local industries discharged 954,099 pounds of heavy metals such as copper, nickel, and zinc, and 80,440 pounds of cyanide to the Field's Point Treatment Facility. A portion of these toxics would eventually pass through the treatment plant and enter Narragansett Bay. There has been a 97.0% reduction in heavy metal discharges to the Field's Point Facility since 1981. The cyanide loadings to this treatment facility were also reduced by 97.6% over this same period. This impressive reduction in toxic discharges by industry has also been noted at the Bucklin Point Wastewater Treatment Facility. The level of toxics entering Narragansett Bay from the NBC facilities has been similarly reduced.

*The NBC will continue to be a leader in the field of wastewater treatment and environmental protection to ensure a cleaner Narragansett Bay for all to enjoy. For more information on the proper disposal of wastes from your facility, contact the pretreatment program staff at 461-8848 ext. 490 / TDD 461-6549.*

Vincent J. Mesolella, *Chairman*

Raymond J. Marshall, P.E., *Executive Director*

June 25, 2012



**MASS MAILING  
ERP - FATS, OILS, & GREASE  
FP & BP - Categories 85, 86, & 90  
List Attached**

Dear \_\_\_\_\_ :

The Narragansett Bay Commission (NBC) in cooperation with the EPA, RI Department of Environmental Management (DEM), and the University of Rhode Island (URI) has developed an Environmental Results Program (ERP) for the management of Fats, Oils, and Grease (FOG). This program provides best management practices for food service establishments to follow that will improve and maintain compliance with environmental regulations, including the newly enacted state law requiring waste cooking grease to be recycled, and handling waste grease. A workbook has been developed to assist facilities in implementing the program. The workbook provides the NBC inspection checklist and an explanation for the reason/necessity of each item outlined in the checklist. There is also a best management practices checklist with explanations of each item. A Self-Certification Program has been developed to assist facilities in participating in the ERP. Participation in this program will assist your facility in the RI Green Hospitality Certification Program. It is recommended that you participate in this program.

Information on the ERP program along with the workbook can be found on the NBC website, [www.narrabay.com](http://www.narrabay.com). A brochure outlining the FOG ERP is enclosed for your reference.

If you have any questions regarding this program, please contact Jim McCaughey, NBC Environmental Safety & Technical Assistance Manager, at 401.461.8848 ext. 352 or the Pretreatment Office at 401.461.8848 ext. 490.

Sincerely,

A handwritten signature in black ink, appearing to read "Kerry M. Britt".

Kerry M. Britt  
Pretreatment Manager

KMB:smb

Enclosure

FATS, OILS, & GREASE  
COMPLIANCE AND BEST MANAGEMENT  
PRACTICES WORKBOOK  
*for*  
RESTAURANTS  
& FOOD PREPARATION FACILITIES

In an effort to address fats, oils and grease (FOG) management problems the Narragansett Bay Commission (NBC), in cooperation with the University of Rhode Island, the RI Department of Environmental Management and EPA Region I have established the NBC FOG-Environmental Results Program (ERP) to help the local food service industry keep FOG out of the sewer.

The goal of the NBC FOG-ERP is to improve the management of FOG at the source of generation through:

- On-site Technical Assistance
- Workshops
- Development and use of FOG Best Management Practices (BMPs)
- FOG management "Self-Evaluations"
- Compliance Inspections
- FOG data collection and analysis



1 Service Road  
Providence, RI 02905

Phone: 401.461.8848  
Fax: 401.461.6540  
www.narrabay.com

NARRAGANSETT BAY COMMISSION

FATS, OILS,  
& GREASE

COMPLIANCE ASSISTANCE  
INSPECTIONS  
SELF-CERTIFICATION

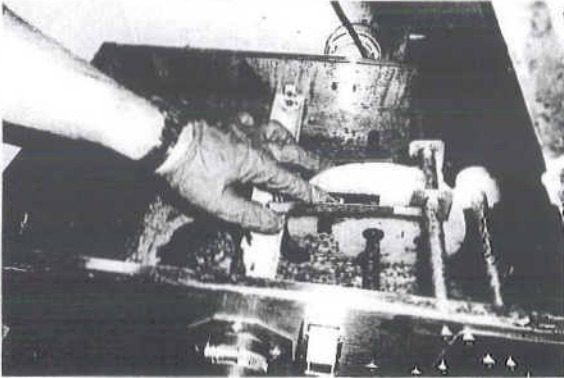
ENVIRONMENTAL RESULTS PROGRAM

One Service Road  
Providence, RI 02905

Tel: 401.461.8848  
Fax: 401.461.6540  
www.narrabay.com

## Fats, Oils and Grease

Fats, Oils and Grease (FOG) are by-products of the Food Service Industry (restaurants, cafeterias and other commercial food service establishments) as well as household kitchens. FOG is generated from the use of vegetable oils and animal fats in the preparation of food products.



Typical operations that produce FOG include washing of dishes, pots, and utensils; floor cleaning, equipment sanitation (collectively referred to as "Brown Grease") and the disposal of used fryolator cooking oils ("Yellow Grease").

When released into the environment, particularly into sewer systems, septic systems or water surface bodies, FOG causes serious environmental harm. FOG that is discharged into the sewer system or septic tanks will accumulate and cause blockages that often result in backups and overflows. FOG that enters municipal wastewater treatment facilities and/or

natural surface water bodies will form unsightly globular balls of grease that can foul equipment, impact beaches and deplete water oxygen levels.

Restaurants that release excess FOG to the sewer system can be closed down if grease blockages and backups occur and can be held financially responsible for any resulting damages.

### The NBC FOG Environmental Results Program

The NBC FOG Environmental Results Program (ERP) has been designed to help improve the management of FOG by local restaurants through a combination of: 1) Compliance Assistance, 2) Voluntary Self Evaluation, 3) Regulatory Inspections, and 4) Certification.

#### 1. Compliance Assistance

Pollution Prevention Engineers from the University of Rhode Island and the NBC are available to meet with participating restaurants owners and managers both one-on-one and in educational workshop settings to help implement sound and sustainable FOG Best Management Practices.

#### 2. Self Evaluation

Participating restaurants will be trained to self evaluate their facility and will certify their FOG management practices utilizing the NBC Oil & Grease Compliance and Best Management Practices Workbook.

#### 3. Regulatory Inspections

As required by NBC Pretreatment Program regulations, all restaurants will continue to be inspected on a regular basis. Participation in the FOG ERP will help firms prepare for regulatory FOG Inspections and help firm comply with FOG regulations.

#### 4. Certification

Restaurants that demonstrate a superior FOG management performance level will be issued a Certification of Best Management Practices which may be displayed in their place of business.

## Biodiesel Production

Yellow grease from fryolators can be converted into biodiesel which can be used in diesel engines and as a renewable home heating fuel. As part of the NBC FOG-ERP, participating restaurants are encouraged to send their waste yellow grease to a biodiesel production facility.



To participate in the NBC FOG-ERP, complete the self-evaluation checklist in the NBC Fats Oils & Grease Compliance and Best Management Practices Workbook and mail a copy to:  
Narragansett Bay Commission  
Pollution Prevention Program  
One Service Road



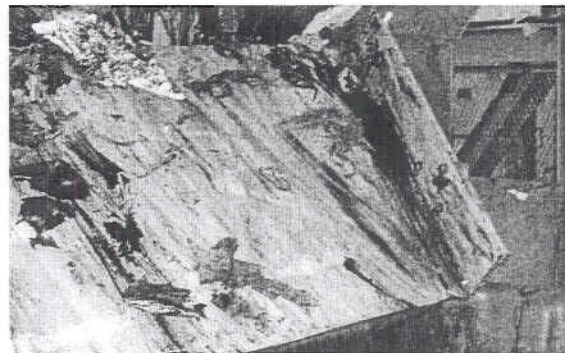
September 20, 2012



**MASS MAILING**  
**Fuel Oil Users**  
**List Attached**

Dear :

As you know the heating season is fast approaching. Fuel oil that is discharged to the sewer can have a significant impact on the Narragansett Bay Commission (NBC) Wastewater Treatment Facilities. These impacts may include fouling equipment, interfering with normal treatment operations, and in severe cases can pass through the treatment facility and adversely impact Narragansett Bay. Below are two pictures of the impact a recent #6 fuel oil spill had on the Bucklin Point facility. Although the spill had no impact on the bay, the oil fouled equipment at the treatment facility, resulting in over \$100,000 in cleanup costs that were incurred by the company that inadvertently discharged the oil.



The company responsible for the spill was not aware that they were losing oil into the sewer. This is one of the main reasons for the NBC permitting boiler facilities and requiring firms to implement self-inspection programs. As you prepare your heating system, it is important to review the conditions set forth in your Wastewater Discharge Permit. These conditions are designed to help you discover and quickly stop an oil leak. Also, it is important to inspect the entire heating system including preheaters and piping and perform any necessary maintenance prior to starting up the boiler.

Please contact the Pretreatment Office at (401) 461-8848, ext. 490 if you have any questions.

Sincerely,

Nathan J. Dean  
Assistant Pretreatment Manager

cc: PT Engineers/Technicians

December 3, 2012



**MASS MAILING  
HOLIDAY SHUTDOWN LETTER  
All IU and SIU (Categories 11 thru 59)  
List Attached**

Dear :

It is that time of year as the holiday season is here! Many companies close for vacation and maintenance activities during this time. We would like to take this opportunity to remind you that the Narragansett Bay Commission (NBC) is here to help industry maintain compliance. Pretreatment staff will be conducting brief inspections throughout this month to meet with our regulatory contacts, answer waste disposal questions, and provide general assistance. If you should have any questions regarding the proper disposal of any wastes generated from maintenance activities or would like to make modifications to your processes during the shutdown, please contact our office and we will be happy to assist you.

During and prior to the industry holiday shutdown, the NBC routinely monitors the sewer system to ensure that illegal dumping of waste does not occur and to catch illegal dumpers. Violators are subject to enforcement action which could result in civil and/or criminal penalties and termination of sewer use privileges. The attorney fees and fines associated with such an enforcement action will greatly outweigh the cost of proper disposal of waste. In general, industries within the NBC's service area are to be commended for their progress to date in reducing the toxic loadings to the NBC treatment facilities and Narragansett Bay. Please feel free to contact the NBC Pretreatment Office at 461-8848, ext. 490 should you need assistance.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kerry M. Britt".

Kerry M. Britt  
Pretreatment Manager

KMB:smb

Enclosure

cc: Pretreatment Engineers and Technicians



December 31, 2012

**SEPTAGE HAULERS  
FEE PAY STICKER LETTER 2013**

Permit Number: «PERMIT\_NUMBER»

Dear «TITLE» «LASTNAME»:

Enclosed please find «NUMBER» 2013 Narragansett Bay Commission (NBC) permitted Septage Hauler Identification Sticker(s). Effective January 2, 2013, a sticker must be affixed to the inside windshield of each NBC permitted truck for identification purposes. Vehicles without a sticker will not be permitted to dump at the NBC Septage Receiving Facility.

If you have any questions regarding this matter, please contact the NBC Pretreatment Staff at 461-8848, ext. 490.

Sincerely,

Sulema Martinez  
Pretreatment Clerk

Enclosure(s)

***NEWSPAPER AND MAGAZINE  
ARTICLES***

## ENVIRONMENT

**Bay Commission to be honored for treatment plant  
Also honored is executive director of the Warwick Sewer Authority****By BARBARA POLICHETTI JOURNAL STAFF WRITER**

The better wastewater professionals do their jobs, the less they are noticed.

When the 19 public treatment plants in the state are run well, people can forget about them.

But the federal government and a regional professional organization do take notice of the work it takes to keep sewage and other contaminants from polluting our waterways. In January, the Environmental Protection Agency and the New England Water Environment Association will recognize five wastewater plants or professionals from Rhode Island as being among the best in their field. "Every day there is 100 million gallons of wastewater that has to be treated in Rhode Island for the sake of our health, our environment and the economy," said Bill Patenaude, principal engineer in the Department of Environmental Management's Office of Water Resources.

"These are people doing jobs that most people don't think about, and the awards, which represent a partnership between government and a private professional organization, are a great team effort to acknowledge hard work that is done for the common good," he said.

The DEM participates in the nomination process for the awards, which will be handed out in Boston on Jan. 25 at an annual event run by the New England Water Environment Association. The association is an industry organization representing more than 2,100 wastewater professionals from throughout New England. Rhode Island's award recipients include the Narragansett Bay Commission's Field Point Wastewater Treatment Plant, which is being lauded for overall quality as the recipient of the EPA's 2011 regional excellence award for a treatment plant.

The award acknowledges "outstanding work" by the entire Bay Commission staff, including daily operations as well as special construction projects. Janine Burke, executive director of the Warwick Sewer Authority, is receiving the EPA's 2011 regional award for excellence as a treatment plant operator. EPA officials said they recognize the hard work that Burke and her staff put in to resurrect Warwick's treatment plant after it was flooded during the historic rains of 2010. Burke has also helped promote the wastewater profession and worked with both the EPA and the DEM, the award announcement states. The West Warwick regional treatment facility is also getting recognition with its chief operator, James Di-Caprio, named Rhode Island Operator of the Year by the New England Water Environment Association. The association is also giving an operator safety award to Stephen Cote of the Narragansett Bay Commission. It's more kudos for the Narragansett Bay Commission with Joseph LaPlante, operations and maintenance supervisor, chosen to receive a special award for significant contributions to the profession, including cost-effective plant operations and training.

Another Rhode Islander will receive an award, but is not an industry professional.

Naryan Murthy, a freshman at La Salle Academy, will be recognized as the winner of the Stockholm Junior Water Prize State Competition for research he did on the potential threat pharmaceutical waste poses to the world's water supply. The Stockholm state prize is part of an international competition that gives thousands of participants from more than 30 countries the opportunity to compete for a chance to represent their country at an annual symposium in Stockholm.

**[bpoliche@providencejournal.com](mailto:bpoliche@providencejournal.com) (401) 277-8065**

PROVIDENCE



## Reaching the heights of power

Workers complete the first of three wind turbines that the Narragansett Bay Commission is installing to reduce electricity costs at the Fields Point treatment plant

By **BARBARA POLICHETTI** JOURNAL STAFF WRITER

PROVIDENCE — The 600-ton crane stood at the ready Wednesday, its black and red boom reaching high above the Fields Point wastewater-treatment plant. Work crews eyed gray clouds on the horizon and regularly checked wind meters, waiting for gusts to drop below 22 mph. Conditions have to be perfect when the task at hand is to hoist an 80,000-pound, three-blade rotor and place it atop a 230-foot tower — all while avoiding buildings, power lines and sewer tanks at the city's working waterfront. Things didn't work out on Wednesday, but on Thursday the propeller was lifted into place, marking the completion of the first of three wind turbines that the Narragansett Bay Commission is installing to reduce electricity costs at the treatment plant. Jamie Samons, public affairs manager for the Narragansett Bay Commission, said the \$12-million turbine project is expected to generate enough power to cut the treatment plant's electrical bills by 40 to 50 percent. Currently, it costs about \$2.5 million a year for electricity at the Fields Point plant, which is off Allens Avenue, amid scrap piles and mounds of coal that line the city's western shoreline.

In addition to saving money, the turbines will provide a clean source of energy and reduce carbon emissions. “We’re a clean water agency so this makes sense for us in that respect too,” Samons said.

It’s more than a little ironic, she said, that blustery weather has delayed the completion of the first turbine since it is the air currents at Fields Point that made it ideal for the wind turbines. “Before we got started we had to conduct tests to see if there was enough wind at this location to justify the project and the results were definitely favorable,” she said. All three towers, which will be clearly visible from Route 95, should be completed by the end of the month, Samons said. Each turbine will consist of a tower more than 200 feet tall with 150-plus-foot blades that will bring the total height to about 365 feet.

The project is being done by Gilbane Building Co., which is working with special cranes from Massachusetts and with a Tennessee-based rigging company that has experience

putting up turbines. “This is a little unusual,” Gilbane project manager Bob Vierra said as he looked at the giant rotor. “Usually these turbines go up in places like cornfields where you have all the space in the world,” he said. “But that’s not the case here.”

Samons said Narragansett Bay Commission officials began talking about incorporating wind power into the plant’s operation several years ago when they were putting together a long-term financial plan. It took awhile to come to fruition, she said, due to the required research and multiple permits, including one from the Federal Aviation Administration since the turbines are at the edge of an approach path for T.F. Green Airport in Warwick. After the turbines are complete, the next step will be to install the transformers and conduit needed to transmit the power, she said, with plans to generate electricity by the summer. “We’re really excited about this,” she said. “We are always looking for ways to be more energy efficient.”



## SUPER BOWL

Some super myths that need to be spiked

**By ALEX KUFFNER JOURNAL STAFF WRITER**

Since the Super Bowl is all about excess, it seems only fitting that a lot of claims have been made about America's, um, biggest sporting event. (We'll get back to that last bit later.)

With the Patriots on the verge of their fifth Super Bowl appearance in 11 years, New England seems a particularly good place to examine some of these "facts." Politifact Rhode Island decided to look at a few claims that have been passed around over the years. However, in the spirit of a day that shouldn't be taken too seriously, we're giving the Truth-O-Meter a break.

### **Sewer overflows**

Here's one that comes up every year. It goes something like this: sewage systems fail during halftime because all those fans who've been holding it through two quarters run to the bathroom and then flush at the same time.

Others have explored this claim and found no link whatsoever between the Super Bowl and overtaxed sewage pipes or treatment plants.

Nevertheless, we checked in with two of Rhode Island's biggest sewer operators. After all, with so many Patriots fans in the Ocean State and so many recent Super Bowl appearances by the team, shouldn't this be Ground Zero for the halftime-sewer-failing phenomenon?

"It doesn't happen," said Janine Burke, executive director of the Warwick Sewer Authority.

"We never had it happen here," said Jamie Samons, spokeswoman for the Narragansett Bay Commission, which operates wastewater-treatment plants in Providence and East Providence. Samons did refer us to a report in a sewer industry publication that found in one California community an increase in water flow at halftime during the Super Bowl and again after the game.

And Burke pointed us to an article in a different industry magazine that looked at sewer use in an Indianapolis neighborhood when the Colts played in the 2007 Super Bowl. Usage was higher than normal before the game but lower than normal during the game, including the halftime break.

"There is apparently some contention over flushing patterns during the Super Bowl," Samons acknowledged. Still, neither piece reported that sewer systems failed.



Burke said it's conceivable that sewer use increased in Warwick during the Patriots previous Super Bowl appearances, but sewer systems are designed to handle heavy usage. So the system never failed, right?

"I think I would have remembered that," she said.

### **Domestic violence**

Ever heard that Super Bowl Sunday is the worst day of the year for domestic violence? This is a claim that fits neatly into the stereotype of the loutish male sports fan.

Snopes.com has charted the history of this claim, going back to its origins in a news conference held by a coalition of advocacy groups in Pasadena, Calif., before the 1993 game between the Dallas Cowboys and the Buffalo Bills (the Cowboys won, 52-17). According to a Washington Post story that debunked the claim a few days later, the groups relied on a small study of football fans and domestic violence that was carried out in northern Virginia. But, it turned out, they misquoted the study's findings, wildly overstating the results.

Still, the claim won't go away. Locally, in 1997, in response to it circulating anew through the University of Rhode Island, the head of the school's Center for the Study and Prevention of Intimate Violence sent out a campus-wide e-mail that said that new research actually found "no relationship at all" between the game and violence against women, according to a story in The Journal.

Since then, no other studies have shown a direct link between the game and an increase in domestic violence, said Deborah DeBare, executive director of the Rhode Island Coalition Against Domestic Violence. She also hasn't heard anecdotal evidence of any connection in Rhode Island.

DeBare said that the heightened emotions that come with the Super Bowl could make it a risk factor for violence. Excessive drinking during the game is also a risk factor, as is gambling,

But, said DeBare, "it's not a causal relationship."

### **Car accidents and DUIs**

People tend to drink a lot during the game, so it stands to reason that car accidents and DUIs are higher on the day of the Super Bowl. We found many references on the Internet to game day being one of the worst days for drunken driving, but no research to back up those claims

The National Highway Traffic and Safety Administration and the Insurance Institute of Highway Safety have both compiled lists of the worst holidays for drunken driving (as you'd expect, New Year's Day and the Fourth of July are at the top), but neither examined Super Bowl Sunday.

The Rhode Island State Police superintendent, Col. Steven O'Donnell, double-checked with the NHTSA and couldn't find national or state statistics for accidents on game day.

But he said it's logical to expect the chances for drunken-driving incidents to increase with the Super Bowl and compared the day in some respects with New Year's Eve. So the state police increases patrols on the day of the game.

Preventing drunken driving "is one of our top priorities anyhow," O'Donnell said. "When there's some event when people would take advantage of more alcohol, then we'd tend to increase patrols."

## **Food**

This is perhaps the most popular category of statements about the big day. Pick a junk food or beverage and you can almost be sure that someone somewhere has claimed that more people consume it on Super Bowl Sunday than any other day of the year.

First, some context. Game day is the second-largest eating day of the year, behind only Thanksgiving, according to the U.S. Department of Agriculture. That means a lot of wings are eaten.

The National Chicken Council reports that the Super Bowl weekend is "unquestionably the biggest time of the year for wings," with 1.25 billion wing portions expected to be served this year.

A lot of pizza, too. Pizza Today magazine says that Super Bowl Sunday is one of the five biggest pizza days of the year. The others are Halloween, the day before Thanksgiving, New Year's Eve and New Year's Day.

And a good deal of beer. Last year, the Nielsen Company found that beer sales on the day of the game ranked seventh annually behind Memorial Day, the Fourth of July and other holidays.

"There's certainly a lot more activity," said Chuck Borkoski, vice president of marketing for beer distributor McLaughlin & Moran. "Especially when the Patriots are fortunate enough to be in the Super Bowl, then it ramps up beer sales."

The Patriots' run through the playoffs to the Super Bowl has also been a boon to pizzerias. Tommy Sacco, the owner of Tommy's Pizza, will double the number of delivery drivers at his stores in Cranston and Providence to deal with the additional business from the Super Bowl. He will also bring in more bakers.

Sacco is a longtime fan of the San Francisco 49ers, but his loyalties are divided. "As far as a pizza man," he said, "I've come to love the Patriots."

## **America's biggest sporting event?**

And lastly, the 2011 Super Bowl, with 111 million viewers, was the most-watched TV program of all time in the United States, overtaking the previous record-holder — which was the 2010 game, according to the Nielsen Company.

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Narragansett Bay Commission sets example for saving energy

**Marion Gold**

As you drive on Route 95 through Providence, you can't help but notice the three large wind turbines to the east of the highway bordering Narragansett Bay.

The turbines are the most visible sign of the Narragansett Bay Commission's award-winning energy-efficiency and renewable-energy initiatives. Through a combination of efficiency improvements and renewable-energy projects, the commission estimates that it will be able to reduce its use of grid-delivered electricity by as much as 45 percent — saving money, protecting the environment and providing a model for clean energy in Rhode Island and across the region.

The Narragansett Bay Commission operates two of Rhode Island's largest wastewater treatment facilities. Fields Point, in Providence, and Bucklin Point, in East Providence, treat waste and storm water from 10 Rhode Island municipalities, serving 360,000 people and 8,000 businesses. Cleaning and purifying the wastewater minimizes pollution to Narragansett Bay, but the process is energy intensive. Large amounts of power are required for the pumps, aeration operations and other processes that remove pollutants.

"Most people don't realize how much electricity it takes to clean water. Rhode Island's 19 municipal [wastewater treatment facilities], as a group, are one of the largest energy users in the state," says Jim McCaughey. McCaughey, the commission's environmental program manager, has helped coordinate much of the ongoing energy work. "We wanted to lower wastewater treatment energy use and explore renewable energy — both to save annual operating expenses and reduce greenhouse gas emissions."

In 2008, the commission received a \$275,000 Environmental Protection Agency grant to work with all 19 Rhode Island wastewater treatment facilities to identify energy-improvement opportunities. McCaughey said they started by closely tracking how much energy these facilities used, and then looked at opportunities to reduce use. To oversee the process, the commission put together an energy team that included facility superintendents, engineers, electricians, finance managers, electric and gas utility contractors and engineers from the Rhode Island Department of Environmental Management, the EPA and the Rhode Island Manufacturers Extension Services. Students from the University of Rhode Island also participated.

The energy team developed energy policies and baseline reports, conducted energy audits of the treatment facilities and used audit findings to develop a set of targets and a prioritized list of projects.

“Our team found that we would be able to reduce electricity use substantially by installing more sophisticated controls for pumps and making other operational and process control modifications,” McCaughey says. “We also learned we could save money through relatively simple improvements, such as upgrading lighting throughout the plants and administrative offices. Financing was a challenge but National Grid provided technical assistance and was able to offer a number of financial incentives.”

While exploring energy-efficiency opportunities, the Narragansett Bay Commission also investigated wind energy. With additional grant funding from the state Office of Energy Resources, the commission collected 24 months of on-site wind data, conducted a cost-benefit analysis and researched wind turbine design, availability and cost. The study concluded that the Fields Point plant, located on the shores of the Upper Narragansett Bay, had sufficient wind resources and infrastructure to support turbines.

After the feasibility study, the commission’s board of commissioners approved the installation of three, 365-foot-high, 1.5 megawatt wind turbines at Fields Point. Once operational (some time over the next few months, when the interconnections to the grid are complete), the turbines will supply between 35 percent to 45 percent of the electric power required by the treatment plant. The \$12.2 million project is being funded through loans issued by the state’s revolving clean water fund.

In January, the Fields Point Wastewater Treatment Facility was selected by the EPA for a 2011 Regional Wastewater Treatment Plant Operations and Maintenance Excellence Award. As Curt Spalding, regional administrator of the EPA’s New England offices, noted when giving the award: “The professionals operating these wastewater treatment plants, as well as the municipalities and the state environmental agencies that support them, are essential to keeping our environment healthy by protecting water quality. They are devoted, often underappreciated, and demonstrate a high level of commitment under extreme situations. I am proud to give them the credit they deserve.”

For more information on the energy-efficiency and renewable-energy initiatives under way, visit [narrabay.com](http://narrabay.com) .

To follow the example of the Narragansett Bay Commission and begin saving money and energy in your own home or business, visit [powerofaction.com/ri/](http://powerofaction.com/ri/) .

Marion Gold, Ph.D., is director of the URI Outreach Center and serves on the Rhode Island Energy Efficiency and Resource Management Council. Send her your questions about energy or other home-resource management issues to: Energy Source, Features Department, The Providence Journal, 75 Fountain St., Providence, RI 02902. You can also e-mail [features@providencejournal.com](mailto:features@providencejournal.com) . Please put Energy Source in the subject field.

# Tunnel Vision

- By Erik Gunn
- Cover Story
- [May 2012](#)

Combined sewer overflows were once a regular headache for the wastewater treatment operators and the residents living around Narragansett Bay in Rhode Island, but thanks to an aggressive program that combined capital investment and changes in procedure, they are becoming a thing of the past.

CSOs haven't been eliminated entirely, but they've diminished considerably, says Ray Marshall, executive director of the Narragansett Bay Commission. There's room for even more improvement, but the benefits have been readily apparent — fewer beach closings on the bay and fewer disruptions in the busy shellfishing industry in the waters to the south. Not to mention reduced threats to health and safety.

Marshall gives the credit to the commission's Combined Sewer Overflow Abatement Plan that was begun in 2001 after a decade of planning. An ongoing monitoring program helps keep the effort sharp. And thanks to extensive communication going all the way back to the project's planning stages, it's enjoyed support from the people who count most — the ratepayers whose sewer bills bear the program's cost.

"We enjoy a very positive reputation," Marshall says. "Quite a few of the political figures in the state have made it a point to come down and see our facility."



*Workers lower ventilation components into the Deep Rock Tunnel during construction. As the tunnel boring progressed, necessary utilities such as electricity and fresh air also had to be built forward.*

## Urban utility

The Narragansett Bay Commission is a regional authority divided into two separate service districts, each served by its own treatment plant. The Field's Point service district includes the City of

## Municipal Sewer & Water™

Providence and the communities of Johnston and North Providence to the northwest of the bay as well as a small segment of the Town of Lincoln. The Bucklin Point district ranges north along the eastern shore of the bay, from East Providence up through Pawtucket and Central Falls and on to the rest of Lincoln and Cumberland.

Altogether the commission serves some 360,000 people, about one third of the state's population of 1.1 million, and covers about a fifth of the state's acreage — the urban and industrial portion, says Marshall. It controls about 110 miles of interceptor pipes and the associated control regulators. Some 1,200 or more miles of laterals owned by the communities the commission serves send sewage through the commission's pipes and to its treatment plants.

But about 40 percent of the area the commission serves uses combined sanitary/storm sewer systems, Marshall says. Historically, heavy storms brought significant sewage overflows as the pipes normally conveying effluent filled with rainwater.

Those overflows regularly put the commission in violation of the federal Clean Water Act, and in recent years, Marshall notes, "the bar keeps getting raised higher and higher" as regulations become more stringent.

## Shellfishing impact

Sewer overflows hold a special hazard for Narragansett Bay. The bay is a prime site for shellfishermen targeting hard-shell quahog and soft-shell steamer clams. Shellfishing is both a commercial industry and a pastime for local residents and tourists. After every overflow, however, fishing must be shut down until sampling tests establish that the water in the bay is clean again. That's been as long as seven days at a stretch, says Marshall.

In the early 1990s, the commission agreed with the Rhode Island Department of Environmental Management to develop a comprehensive abatement plan for overflows. Separating all of the combined sewers — "the deepest pipe in any street" — would have created huge disruptions, especially in commercial districts, and so was ruled out. Instead, the agency planned to build a series of underground storage tanks and tunnels.

That plan evolved over subsequent years in response to changing federal rules, and in 1997, the commission narrowed a list of more than 16 options to three, presenting them to a stakeholders advisory group representing utility ratepayers, business owners, environmentalists, shellfishermen and the general public.

Besides the original plan, the advisors also considered a plan to build 19 smaller satellite treatment plants at overflow sites to intercept and immediately treat effluent that would otherwise be dumped

in the lake. "That never won widespread support," Marshall says; the additional plants would have required additional personnel — and no one wanted them built in their neighborhoods.

## Three-phase project

The advisors favored a different alternative: constructing six miles of underground storage tunnels to serve as holding tanks for water that rapidly accumulates during storms, along with several other related projects.

"The Deep Rock Tunnel is the centerpiece of an entire three-phase program," Marshall says.

Phase 1 of the Combined Sewer Overflow Abatement Plan includes the first tunnel, which serves the Field's Point district, and related projects. Begun in 2001, the \$350 million initial phase was completed and its components put into use in 2008. Phase 2, priced at \$245 million, is now beginning. According to Bay Commission chief environmental engineer Phil Albert, this phase consists of another dozen contractors building long interceptor lines to connect overflow points with the tunnel. It also includes creation of a wetlands treatment system to treat overflow after screening and settling of effluent in one area, Marshall says, along with 12 sewer-separation projects in the City of Providence.

Phase 3 will be to build a second deep rock tunnel in the Bucklin Point district about the same size as the Field Point district tunnel.

"The whole thing should be done by 2021," says Marshall.

The cost of the project is being financed through the Rhode Island Clean Water Finance Agency, which allows for a 33 percent discount on interest rates. Debt service costs are applied to ratepayers' bills.

## Concrete results

Since they came online in 2008, the first tunnel and other abatement measures have captured 3.5 billion gallons of sewer overflow. Of that, 90 percent has received full secondary treatment, and 10 percent has been treated in the commission's wet-weather facilities — a treatment plant within the treatment plant — where it gets primary treatment plus chlorination.

"We've treated an extra 100 million gallons of flow per month since that tunnel has been online," Marshall says.

Once the entire project is completed in the next decade, the commission expects the number of overflows to drop to four per year from about 30 per year before any of the work began. But already results are showing.

Before the abatement project, Marshall says, those 30 “rain events” per year led authorities to shut down shellfishing beds in the southern portion of the bay for as many as 200 days — more than half the year.

Now, closures of the shellfish beds have dropped to fewer than 10 over the two-year period of 2009-2010. And instead of lasting seven days at a time, the commission’s sampling has found the water to be clean enough after as few as four or five days. That has allowed the beds to be reopened sooner. In fact, the findings have led the state environmental and health departments to revise the criteria for halting shellfishing.

“Historically, once half an inch of rain falls they assume there have been overflows,” Marshall explains. The state would automatically order a 5,500-acre shellfish bed area closed. After another half-inch of rain — meaning an inch total — the state would shut down a second 4,500-acre area. Now the standard for when to shut down the beds has risen: the first area isn’t shut until there have been eight-tenths of an inch, and the second not until there’s been a total of 1.5 inches.

In the upper part of Narragansett Bay, the number of pollution-related beach closings was down 36 percent in 2010 (the most recent year available) compared with four years earlier, and the number of days lost to closures was down by 73 percent. The beach closest to a commission treatment plant — Conimicut Beach — was closed just eight days in 2010, compared with 45 days in 2006.

“The tunnel and the combined sewer overflow facilities overall are doing their job, and we’re able to document that by the water-quality monitoring that’s being done and by the results that we’re seeing,” Marshall says.

## Monitoring and maintenance

Additional elements of the commission’s effort include monitoring and preventive maintenance, with commission employees handling general maintenance and outside contractors filling in on specialty tasks such as video inspections and cleanings. Meg Goulet, who manages the maintenance program for the agency, notes that some of the lines are a century old.

Working from a comprehensive set of inspection and maintenance data, Goulet and her staff are ranking the conditions of the entire network, scheduling maintenance and other projects, including lining sewers, reconfiguring manholes, and dig-and-replace repairs where necessary.



## Municipal Sewer & Water™

A regular program of monitoring water quality is overseen by Tom Uva, director of Planning, Policy, and Regulation for the Bay Commission. That includes sampling rivers upstream and downstream of combined sewer overflow points to see if blockages are creating overflows in dry weather. It also includes weekly trips around the bay itself in a 23-foot boat that samples water and conducts surface mapping. A pair of stationary water-quality sensors continually check for temperature, salinity, dissolved oxygen, pH, chlorophyll and water clarity as well. And when extreme weather hits, “we’re out there monitoring it,” Uva says.

## Good business and goodwill

Besides simply being the right and necessary thing to ensure that treatment and collection systems are operating at peak efficiency, there’s self-interest in monitoring, Uva notes. With federal and state regulators requiring treatment operators to reduce nitrogen loadings in discharge, it’s important to get data that shows whether the treatment operation is actually the nitrogen source — or if it’s coming from elsewhere.

“The monitoring program like this really protects your ratepayers,” Uva says.

Altogether, the commission’s laboratory analyzes 110,000 samples per year, including 26,000 directly collected by the monitoring program. Urban rivers are sampled twice weekly for bacteria, for example.

Efforts like these have drawn industry recognition. Phase 1 of the CSO abatement project was awarded Project of the Year by the Underground Construction Association for 2009. Both the CSO abatement project and the water monitoring program were cited when the National Association of Clean Water Agencies gave the Bay Commission its Excellence in Management Recognition award in 2011 — the third time in 10 years the agency has received the designation.

Support remains strong close to home as well, Marshall says. “I think the stakeholders group that we had back in the mid- to late-90s is the reason why,” he says. “We let people take part — it wasn’t run by a bunch of engineers. People felt like they had some say.”

Well on its way to its goal of sharply reducing overflows, the Narragansett Bay Commission seems likely to maintain that goodwill — and keep earning kudos as well.



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ENVIRONMENT

# NBC honors 21 companies for regulatory excellence

By PBN Staff  
Twitter: @ProvBusNews

Posted 5/25/12

PROVIDENCE – At its 18th annual Environmental Merit Awards ceremony, the Narragansett Bay Commission recognized 21 local companies that achieved perfect regulatory compliance and outstanding pollution prevention throughout the year.

NBC honored Providence Community Health Centers Inc. with a stormwater management award for its efforts to reduce and manage the flow of stormwater from their facilities to the sewers and ultimately into the rivers and Narragansett Bay.

The University of Rhode Island Center for Pollution Prevention received a special award from the environmental advocacy agency for educating and preparing students to find sustainable and cost effective solutions to environmental problems.

“To date more than 500 companies, many of which are located within the NBC’s service district, have eliminated millions of pounds of waste, reduced environmental liability and health risks, and have increased business profitability due to the work of the Center,” said an NBC release.



R.I. Department of Environmental Management Director Janet Coit delivered the keynote address at the awards ceremony on May 24.

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“Hats off to the 19 companies being honored today for their stellar environmental compliance records,” said Coit. “When businesses care about the impact they have on the environment, they are making a long-term investment in Rhode Island —and that means a better place to live, work, and play for us all.”

NBC’s other 2011 perfect compliance award winners were:

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# URI PPC recognized by Narragansett Bay Commission

By SHAUN KIRBY

**SOUTH KINGSTOWN—** The University of Rhode Island's Pollution Prevention Center received recognition last week from the Narragansett Bay Commission (NBC) for its work in educating students about sustainable solutions to the environmental issues we face today. The program, created by the Rhode Island Department of Environmental Management (RIDEM) in 1988, is led by Professor Emeritus Stanley Barnett and Associate Research Professor Eugene Park. Both work and teach within URI's Department of Chemical Engineering.

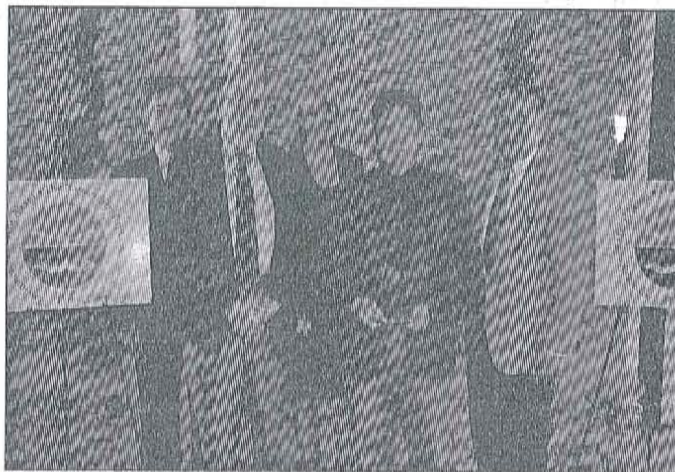
The Center was presented with NBC's 2011 Pollution Prevention Environmental Merit Award at its 18th annual awards ceremony on May 24.

"We are very honored to receive this award," said Park. "At a time when budget constraints have severely limited the ability of the Center to operate effectively, we are still able to help industry deal with environmental issues."

The Center has provided free engineering consultancy to over 500 companies since its founding, offering businesses the opportunity to develop innovative ways of reducing their environmental impact in surrounding communities.

"The Center has close working relationships with the RIDEM and other government agencies like the Narragansett Bay Commission who interface directly with industry," said Park. "URI staff and students provide direct technical assistance to help businesses find cost-effective solutions to environmental issues."

"An interdisciplinary approach is important since there is a wide range of industries like textile, seafood processing, chemicals, and metal finishing," he added. "Our company projects come about because of direct inquiries from companies or through referrals from regulatory agencies like



URI's Pollution Prevention Center was recognized last week by the Narragansett Bay Commission (NBC) for its efforts in providing innovative and economic consultation on environmental issues for over 500 businesses in the area. From left to right: NBC Director Ray Marshall, Center Director Stanley Barnett, DEM Director Janet Coit, URI Professor Eugene Park, and NBC Chairman Vincent Mesoletta.

DEM or NBC. We are also engaged in research to develop new, more sustainable technologies that generate less waste."

Park further noted that the Center is mindful of businesses' economic needs in the current downturn, and thus aims to develop fiscally viable programs that produce monetary benefits as well as environmental.

"Our philosophy is to help the economy and the environment at the same time," said Park. "The economy is not doing well these days as indicated by the number of manufacturing firms decreasing in Rhode Island over the last couple decades."

"In order to remain competitive and even regain economic presence, the 'bottom line' has to be watched so ever more closely," he added. "Successful implementation of pollution prevention will help to reduce costs, increase efficiencies, and eliminate liabilities that can negatively affect a company."

URI graduate and undergraduate students use the Center for their hands-on education away from the classroom, an experience which Park deems crucial if the initiatives which the Center espouses are to be successful in the future.

"Our students work as interns to get directly involved in these company projects and assist in various research initiatives," said Park. "This firsthand experience is beneficial as they prepare to enter the working world."

"I also teach an upper level Pollution Prevention course every year which affects a larger group of students," he added. "This course includes application of engineering concepts in pollution prevention scenarios, case studies, and field trips."

Park hopes that, with the recognition from the Narragansett Bay Commission, the public and governmental agencies will become more aware of the issues the Center seeks to solve, as well as the process behind them.

"We used to receive over \$200,000 per year from the state with other federal grants, but now we are barely supported by some federal Environmental Protection Agency grants," said Park. "Perhaps this award will bring attention to the value of our program and we may get government and corporations to help support our efforts."

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# Waiting for future in wind, water



Edward Fitzpatrick

Look, I'm not complaining. The fireworks were fantastic. The Rhode Island Philharmonic Orchestra played the 1812 Overture. And Cranston's own Miss USA was there.

But as I sat on a hill at India Point Park on the Fourth of July, I couldn't help but wonder: Why aren't those wind turbines turning?

It's great that the Narragansett Bay Commission built those three turbines to help power its wastewater treatment plant at Field's Point, in Providence. And I was happy to see the 364-foot-tall windmills go up sometime around St. Patrick's Day.

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house and the walls are up but the wiring still needs to be done," Samons said. "Unfortunately, you just can't run a long extension cord from the Manchester Street Power Station."

The Narragansett Bay Commission has secured all the necessary approvals for the turbines and signed all the necessary agreements with National Grid, she said. It even secured approval from the Federal Aviation Administration, which made it lower the turbines by 15 feet because they're on the edge of the flight path for T.F. Green Airport, she said.

Apparently, I'm not the only one who's been wondering when the turbines are going to start turning. "A lot of people ask," Samons said.

Field's Point plant, and the three turbines will provide about 40 percent of the electricity needed there, Samons said. Another alternative energy project will convert methane to energy at the utility's Bucklin Point plant, in East Providence, she said.

"We really felt that as one of the state's largest environmental organizations, we had a responsibility to explore green energy," Samons said. "It just makes sense. It's the right thing to do."

One interesting side note is that the utility did not use federal stimulus money for the wind turbines because it couldn't find a way to make it a 100-percent American-made project. Samons said no U.S. manufacturer had the interest or capability of taking on a project this small, so the turbines ended up being 85 percent Amer-

to go out within the next week.

"Everyone should be excited," Mouradjian said. "We are looking for a public/private partnership to facilitate as much recreational access and public benefit as possible at that site." The goal is to make that property a "portal to the bay," perhaps with public transportation to the islands in Narragansett Bay.

But in the year ahead, the site will be used as a staging area for the second phase of the Narragansett Bay Commission's combined sewer overflow project, Mouradjian said. "That will give us plenty of time to flesh out the next step of accepting and working with one of these proposals," he said. "We want to get people the benefit they invested in as quickly as possible, but we also need to work with the proposals to get the long-



# Rhode Island Public Radio

Economy

8:55 AM WED JULY 11, 2012

## Turbines may spin by end of summer

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By BRADLEY CAMPBELL

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PROVIDENCE, RI – The wind turbines at Field's Point continue to stand like statues. But crews are working to have them spinning by the end of the summer.

The project is about 87-percent complete right now. Or so says the Narragansett Bay Commission. It operates the Field's Point Wastewater Treatment Facility. And it's come under scrutiny for the giant, inert white blades looming over the bay.

But as the Commission's Director of Planning, Policy and Regulation, Tom Uva, says patience is key. "It's kind of like building a house. And you put the walls up and you can't wait to move in but you don't have your certificate of occupancy because you don't have toilets installed and you don't have the wiring in the house run so it's that same type of situation."

Uva says wrapping up the turbine project couldn't come soon enough, "No one wants to see them spin more than we do, the people, the employees at the bay commission. We are really psyched about this project."

Uva says crews are currently snaking wires underground that will connect the three turbines to the grid. He says the commission hopes to run the first tests of the turbines in early September.

Do you have insight or expertise on this topic? Please email us, we'd like to hear from you. [news@wrni.org](mailto:news@wrni.org)

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## Stars of the Show

- By Briana Jones
- Hearts and Minds
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Plant operators are integral to the education program at Narragansett Bay Commission (NBC) in Rhode Island on multiple levels — and one became the star of the show.

“One of the elementary classes was so impressed by the work of one of our operators, Joe LaPlante, that they wrote a musical about their wastewater treatment experience,” says Jamie Samons, public affairs manager at NBC. “The main character was Joe, so one of the little kids played him.

“It was hilarious! They met him and liked him, and they were so psyched about the whole activated sludge process.”

LaPlante, now the operations and maintenance support supervisor, recently won an Alfred E. Peloquin Award from the New England Water Environment Association, recognizing personal service contributing to excellence in plant operations.

NBC runs education programs for elementary, middle and high school students and for adults, as well. Operators take part in classroom sessions and lead tours and learning activities at treatment plant sites.



*Students from SD Barnes School in Johnston, R.I., get a plant tour at the Bucklin Point wastewater treatment facility.*

## Watershed scientists

NBC operates two wastewater treatment plants, Field’s Point (50-55 mgd average) and Bucklin Point (25-30 mgd average), that jointly serve 350,000 people in 10 cities and towns. The commission’s education programs make sure children and adults understand what those plants do and help them to appreciate the environment the plants protect.

The Woon Watershed Explorers (WWE) program for grades 2-5 began as a pilot program in 2004 and has taken off since then.

“WWE is a full watershed curriculum,” says Cynthia Morissette, environmental education coordinator. “We integrate water-quality testing so kids learn about all the parameters, like dissolved oxygen, pH, and nitrates and phosphates. They do river testing at local sites.”

## Treatment Plant Operator

The nine-month program educates students through monthly in-class lessons, field trips to local rivers, and a culminating environmental education symposium at the end of the school year.

"Toward the end of the program, we incorporate macroinvertebrate studies so the kids get to know how water quality affects life in their rivers and ponds," says Morissette.

The NBC staff and plant operators take the program to the classrooms. "The way we figured would be most equitable was to include one school from each of the 10 service communities," says Samons.

The program supplements state and federal curriculum standards. "WWE is added into the school's curriculum, so it's something extra they get on top of the science they're already getting," explains Morissette. "A lot of the schools have cut back on science, so the program allows the students to get out into the community and see their local water resources as well as work with our operators. Sometimes it actually helps because their curriculum is so limited."

## Curriculum culmination

An end-of-the-year symposium brings the young scientists together from all the schools that took part in WWE to apply what they learned. "At the year-end Environmental Education Symposium in Goddard Park, we bring in a lot of outside organizations," says Morissette. "The operators help the students do water-quality testing, and they teach the kids about the different species in the bay. The operators bring in activities to talk about wastewater and show how the treatment plant is involved with what we do."

Organizing 500 rambunctious kids is not always easy with a small staff. "The operators help the children complete their activities, and they get the kids from place to place," says Samons.

## Moving on up

Older students are not overlooked. "We have a six-week program for high school students," says Samons. "It looks at the environmental as well as economic and policy implications of having or not having clean water on a local and global level."

NBC staff members go out to the schools, but they also bring the students to the wastewater treatment facilities to tour the plants and specifically the laboratories. This gives the students a more scientific look at plant operations.

"We've also done job shadowing for high school students interested in technical careers," adds Samons.



## Treatment Plant Operator

Adults get involved in education, too. For the past two years on Nov. 19, World Toilet Day, students and adults have been artistically enhancing toilet seats with a message about clean water.

"The response was fantastic!" says Samons. "We mounted the toilet seats at a local gallery."

Established about 10 years ago by the United Nations, World Toilet Day is just one way NBC brings awareness that about half the people on the planet don't have access to adequate sanitation.

## Leading the pack

"We consider the folks who work here at NBC the real environmentalists," says Samons. "The operators are the ones on the front line. They've got the rubber to the road every day. They have done more to improve the quality of the water in Narragansett Bay than anyone. It's the folks at the plant who have done the lion's share of the environmental improvement in this state."

With recognition like this, NBC has schools knocking on the door to get into the education programs. "It's important to educate the young about the dangers of bad water and keeping water clean," says LaPlante. "Older people are stuck in their ways and it's very difficult to change bad habits."



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# New wind turbines will power R.I. waste-water plant

ASSOCIATED PRESS DECEMBER 03, 2012

Providence is getting three new wind turbines that will be used to power a city waste-water plant. US Senator Jack Reed is expected to be on hand Monday morning to celebrate the completion of the turbine project at the Field's Point Waste-water Treatment Facility near the city's waterfront. The Narragansett Bay Commission built the turbines at a cost of \$14 million using federal clean water funds. Reed's office said he plans to speak at the event and discuss how clean energy sources can help protect Narragansett Bay from environmental pollution.

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## Giant wind turbines set to spin in October

Kim Kalunian



Kim Kalunian

**NOT A PINWHEEL:** The massive, 365-foot wind turbines stand on the grounds of the Narragansett Bay Commission off Allens Avenue in Providence. The Field's Point wind energy project is set to be complete in October, when the turbines will officially start spinning.

The next step was to set up meteorological towers on the premise. The towers were loaned to NBC by Roger Williams University, and over a 24-month period they collected data to analyze the cost-benefit ratio of the turbines. The towers also helped to determine where the winds were strongest, how many turbines would be needed and at what height the blades would get optimum exposure to currents. What NBC found was that the turbines would be best placed at the edges of their Field's Point grounds, which are triangular in shape. It was decided that three turbines would be erected, one in each corner.

Samons said NBC was lucky that their location provides them with steady wind on most days.

"If you come down here any day of the week, you'll realize it's windy," said Samons, who added with a laugh that she hasn't had a good hair day in years.

In addition to determining the feasibility and location of the turbines, their initial studies also determined that 400 feet would be the optimum height for the turbines. But because the Field's Point location is in the glide path for T.F. Green, NBC was told by the Federal Aviation Administration (FAA) that 400 feet was simply too high.

"The most time-consuming part [of the process] was getting approval from the FAA," said Samons. According to NBC's website, they first approached the FAA in 2008 but weren't granted approval to construct the turbines until 2010.

Eventually, the two organizations compromised on a total turbine height of 365 feet, which is measured from the base of the turbine to the tip of the blade. The blades themselves are about 132 feet long, and weigh about 9 tons.

Samons recalled the process of erecting the turbines, which required the huge blades to be lifted one by one onto the 150-foot tower by a crane. A worker, said Samons, stood atop the tower, and reached out to grab the blade and

If you've driven along 95 through Providence or down Allens Avenue or looked out from Conimicut Point in the last six months, then you've probably seen them: the giant wind turbines reaching toward the sky from Field's Point. But the turbines have been stationary since they were erected, letting the wind blow right past them without even a quiver.

All of that's about to change, though, said Jamie Samons, public affairs manager for the Narragansett Bay Commission (NBC). The turbines at Field's Point are part of NBC's wind energy project, and Samons said they are set to spin in October.

In an interview Monday, Samons said the final component of the wind turbines had just arrived: a switch gear that will allow NBC to complete the connection process that links the turbines to their waste water treatment facility.

"They'll start spinning in the next couple of weeks," she assured.

The turbines were installed in February, but the delay in getting their blades spinning has been the connection process. The turbines are anticipated to provide 40 percent of the energy to the Field's Post wastewater treatment facility, and Samons said any additional power – which they do expect to generate – will be exported and sold to National Grid.

The process of using wind turbines as an alternative energy source began for NBC in 2005 as part of an Environmental Protection Agency-funded project. NBC also secured a \$25,000 grant from the State of Rhode Island Office of Energy Resources to conduct studies on wind turbine feasibility at their Field's Point location.

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guide it into its proper position.

“It’s not a job I wanted,” said Samons.

Although they may appear small from a distance, Samons said the wind turbines are impressively large when you’re right next to them. The blades themselves, said Samons, looked “like whales” on the transport trucks.

In just a few weeks, the large, white, whale-like blades that have been at a standstill since February will finally begin to spin, and the turbines will pump out an estimated 1,500 kilowatts of power each. Samons said once the turbines start spinning, they will continue to do so as long as the wind speed is greater than six or seven miles per hour. Despite their huge size and weight, it doesn’t take much force to push the blades. Of course, the turbines are clean energy, and are projected to offset 3,000 tons per year of carbon dioxide emissions that would have been released from traditional fossil fuels.

The entire Field’s Point wind project has a price tag of roughly \$12 million, a cost NBC expects to recoup in 12 to 13 years.

“We anticipate [the turbines] will save us \$1 million a year,” said Samons.

Samons said it is unlikely the NBC will construct other turbines in the near future, though she said they’re looking into other alternative energy sources.

In addition to exploring solar power, Samons said they’re also looking to turn methane emissions from their sludge digestion process into energy – a process Samons said could provide 30 percent of the plant’s power.

The sludge, said Samons, is exactly what it sounds like: the nasty waste product that would normally be discarded, and whose methane emissions would simply be burned off.

“We have an endless supply of that stuff,” said Samons, who is hopeful they can do something useful with it.

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## BREAKING NEWS

### Combined sewer overflow work in Providence in full swing / Photos

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September 26, 2012 3:10 pm

By Richard Salit



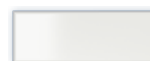
PROVIDENCE JOURNAL PHOTOS / BOB THAYER

A workman looks down into the multi-story hole at Kinsley Avenue and Eagle Street in Providence.

PROVIDENCE, R.I. -- Officials gathered in Olneyville on Wednesday to announce that a project to reduce combined sewer overflows into the Woonasquatucket and Seekonk rivers is in full swing.

Labor leaders and members of the Narragansett Bay Commission said the

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\$113 million project will improve water quality in Narragansett Bay and create more than 250 construction jobs.

Boring machines are being used to lay underground pipes to capture sewage-tainted stormwater that would have otherwise been discharged untreated into the rivers. When completed, contaminated stormwater in and around Olneville and the East Side will be carried to a 3-mile long tunnel, 300 feet beneath Providence, that was completed in 2008 at a cost of \$359 million.

The tunnel, the first phase of the CSO project, can capture and store 65 million gallons of overflow until heavy rains have subsided and the Field's Point Wastewater Treatment Facility is ready to treat it.



The large multi-story hole at Kinsley Avenue and Eagle Street in Providence, where 36-inch pipes are being connected as part of Phase II of the Combined Sewer Outflow Project.

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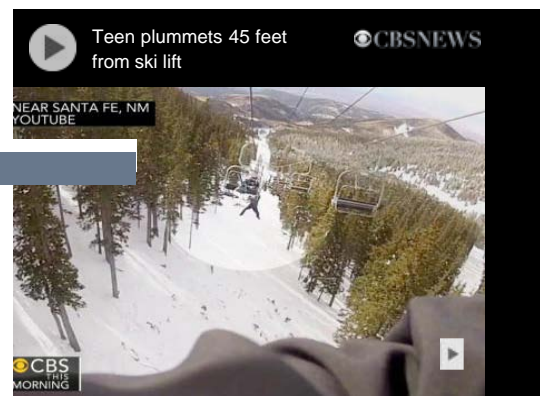
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ENVIRONMENT

# Bay Commission breaks ground on Phase II of clean water project



PBN FILE PHOTO/BRIAN MACDONALD

THE NARRAGANSETT BAY COMMISSION broke ground on the latest Phase II project to bring more stormwater and sewage to its Field's Point facility in Providence for treatment.

By PBN Staff  
Twitter: @ProvBusNews

Posted 9/26/12

PROVIDENCE – At 10 a.m. on Wednesday, the Narragansett Bay Commission broke ground on a part of Phase II of its combined sewer overflow abatement project, at the Rite Aid parking

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lot at 80 Manton Ave. in Providence.

The commission completed Phase I of the project in 2008.

The centerpiece of Phase I was a three-mile long tunnel, 300 feet underground, capable of capturing and delivery 65 million gallons of sewage to the Field's Point Wastewater Treatment Facility.

According to the commission, since 2008, more than 4.5 billion gallons of sanitary sewage and stormwater have passed through the tunnel to receive treatment at the Field's Point facility.



"Water quality in upper Narragansett Bay has improved dramatically and the project is undeniably one of the most successful clean water and public health accomplishments in the history of Rhode Island," said the NBC release.

Phase II of the combined sewer overflow abatement project is intended to bring more storm-related flow to the Phase I tunnel for Field's Point treatment. It is the largest Phase II project, with the intent to connect the Wonnasquatucket River CSO Interceptor to the Phase I tunnel.

The commission made the decision to break Phase II into thirteen discrete construction contracts so "our local Rhode Island companies have a greater opportunity to take part," said the release announcing the groundbreaking.

According to the commission, this construction contract is the largest of the Phase II and is "helping to create good jobs for a green economy."

Vincent Mesolella, chairman of the Narragansett Bay Commission, was joined by Raymond Marshall, the commission's executive director, Michael Sabitoni, president of the R.I. Building and Construction Trades Council, Bonnie Nickerson of the Providence Planning Department and R.I. Sen. Dominick Ruggiero, among others.

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## BREAKING NEWS

### 3 turbines to get test spin in Providence

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October 21, 2012 10:46 am

By Alex Kuffner



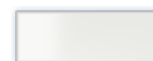
THE PROVIDENCE JOURNAL/MARY MURPHY

The three towers that stand 364 feet tall when their blades are at their highest point, as seen from Sabin Point in East Providence in April. The turbines are expected to be fully operational after about a week of spin testing.

**PROVIDENCE, R.I.** -- After eight months of standing idle, the most prominent wind turbines in Rhode Island are about to start spinning.

The three 1.5-megawatt turbines that have towered over the Providence waterfront since February are set to have their first test spins starting Tuesday before the Narragansett Bay Commission puts them into full operation soon afterward, according to a spokeswoman for the agency.

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The turbines, which each stand 364 feet tall when their blades are at the highest point, are expected to provide up to 40 percent of the electricity at the commission's Fields Point wastewater-treatment plant, which spends \$2.5 million a year on power.

They are the only large wind turbines in Rhode Island's capital city, and are among the largest in the state -- the same size as both a town-owned turbine in Portsmouth that broke down in the spring and a turbine that a developer is putting up in North Kingstown.

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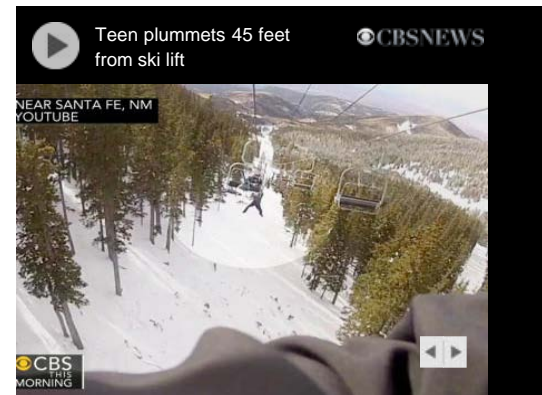
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# Rhode Island Public Radio

RIPR News

5:42 PM WED OCTOBER 24, 2012

## Turbines begin to spin at Field's Point

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By BRADLEY CAMPBELL

Providence, RI – The first of three wind turbines is spinning at Field's Point in Providence. It took nearly nine months from the time the turbines went up to the time they started spinning.

Men in hardhats stood underneath the spinning wind turbine and let out a whoop. The blades looked like elongated swan feathers rotating in the sky. Inside the turbine, Gilbane Construction's Project Manager Bob Vierra monitored energy stats on a computer screen. He says it started generating electricity the moment it started to spin.

"It's been a long time coming," he says. "But it's just exciting to see them spin and actually see them produce power."

Vierra adds the turbine will spin in winds as light as 7 mph and strong as 48 mph. These are some of the largest turbines in the state. The Narragansett Bay Commission says the turbines will produce 40% of the electricity at the waste water treatment plant.

Do you have insight or expertise on this topic? Please email us, we'd like to hear from you. [news@ripr.org](mailto:news@ripr.org).

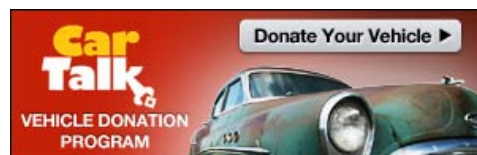
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- Breaking News
- Topics
- Politics
- Sports
- Business
- Opinion
- A&E
- Marketplace
- Cars
- Homes
- Jobs
- Obituaries
- Index

## BREAKING NEWS

### Sen. Reed to mark dedication of wind turbines for RI wastewater plant

Comments 0

December 2, 2012 3:35 pm

By News staff

PROVIDENCE, R.I. (AP) -- Providence is getting three new wind turbines that will be used to power a city wastewater plant.

U.S. Sen. Jack Reed is expected to be on hand Monday morning to "celebrate" the completion of the turbine project at the Field's Point Wastewater Treatment Facility near the city's waterfront.

The Narragansett Bay Commission built the turbines at a cost of \$14 million. Federal clean water funds were used for the project.

Reed's office says he plans to speak at the event and discuss how clean energy sources can help protect Narragansett Bay from environmental pollution.

< Previous | Main Index | Next >

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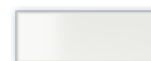
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WPRI

## Providence wind turbine completion

### New wind turbines will power RI wastewater plant

Updated: Sunday, 02 Dec 2012, 9:17 PM EST  
Published : Sunday, 02 Dec 2012, 9:17 PM EST

PROVIDENCE, R.I. (AP) -- Providence is getting three new wind turbines that will be used to power a city wastewater plant.

U.S. Sen. Jack Reed is expected to be on hand Monday morning to "celebrate" the completion of the turbine project at the Field's Point Wastewater Treatment Facility near the city's waterfront.

The Narragansett Bay Commission built the turbines at a cost of \$14 million. Federal clean water funds were used for the project.

Reed's office says he plans to speak at the event and discuss how clean energy sources can help protect Narragansett Bay from environmental pollution.

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### Providence wind turbines to power water treatment facility

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Posted: Dec 03, 2012 5:47 PM EST  
Updated: Dec 17, 2012 5:47 PM EST



By: Chelsea Priest, cpriest@abc6.com

They've been spinning since October and on Monday, the Narragansett Bay Commission officially, along with other state officials celebrated the wind turbines at the Field's Wastewater Treatment Facility.

Narragansett Bay Commission executive director, Raymond Marshall explains, "We had the opportunity to become a clean air agency, essentially by putting up the turbines and reducing the amount of carbon emissions that are generated for the electricity we need, we seized the opportunity."

And not only is it an environmentally friendly option, there are financial upsides too. The three turbines are expected to produce about 35-40% of the energy consumed at the treatment facility. Narragansett Bay Commission chairman, Vincent Mesoletta also adds, "As long as the wind is blowing, we'll be generating revenue. We expect that our revenue picture will be over a million dollars a year given some of the wind modeling we have done."

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Green Living

WPRI

## 3 wind turbines dedicated in Providence

**Expected to save \$1 million a year**

Updated: Monday, 03 Dec 2012, 8:15 PM EST  
Published : Monday, 03 Dec 2012, 12:07 PM EST

PROVIDENCE, R.I. (WPRI) - Officials and environmental leaders commissioned three new wind turbines in Providence Monday.

They're located at the Narragansett Bay Commission's Field's Point Wastewater Treatment Facility.

The facility is among the oldest in the country. It started operating in 1901, yet has some of the world's most advanced wastewater treatment technology, and is a national leader in green energy for clean water.

The 1.5 MW turbines are 365 feet tall and have the potential to provide approximately 40% of the facility's energy.

The project took one year and \$15-12.5 million to build.

It expected to save the Narragansett Bay Commission \$1 million a year.

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SweetJack

## New wind turbines commissioned at Fields Point in Prov

8:33AM Tuesday  
December 4, 2012

By Steve Klamkin, WPRO News

The Narragansett Bay Commission Monday commissioned its three new wind turbines that are expected to provide nearly half the electricity needed to power its Fields Point wastewater treatment plant.

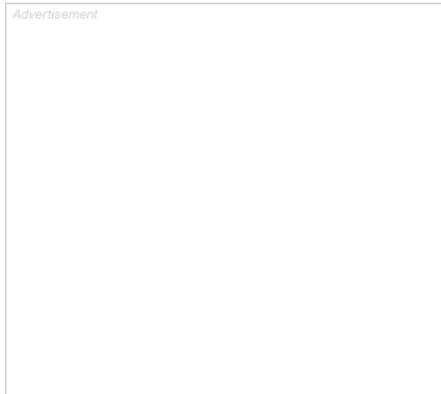
The three turbines were built at a cost of \$14 million and are expected to shave about \$900,000 per year off the NBC's bill to run the Field's Point plant.

"This is an enormous accomplishment for the Narragansett Bay Commission, its really expands our environmental presence in Rhode Island," said Vincent Mesolella, chairman of the NBC board.

"We're going to be generating 4.5 megawatts of power. The good Lord is our partner in this endeavor, and as long as the wind is blowing, we're going to be generating dollars and supplying power, clean, green energy."

Senators Jack Reed and Sheldon Whitehouse both welcomed the addition, as did Mayor Angel Taveras.

Advertisement





***NBC PRESS RELEASES  
AND PUBLIC NOTICES***

# NARRAGANSETT BAY COMMISSION

## Perfect Compliance

*in recognition of Significant Industrial User Perfect Compliance in 2011*

The Narragansett Bay Commission recognizes these Significant Industrial User companies for perfect regulatory compliance with Pretreatment Program regulations during 2011:

A. Harrison & Company, Inc.  
AG&G Incorporated  
Darlene Group, Inc.  
Fujifilm Electronic Materials USA, Inc.  
Impco, Inc.  
Metallurgical Solutions, Inc.  
Providence Journal Company  
- Production Facility  
Tanury Industries PVD, Inc.  
Umicore USA, Incorporated

A.T. Cross Company  
Callico Metals, Inc. dba Oster Pewter  
Electrolizing, Inc.  
Hord Crystal Corporation  
Materion Technical Materials, Inc.  
Osram Sylvania, Inc.  
Providence Metallizing Company, Inc.  
Stackbin Corporation  
Technodic, Inc.  
Vital Diagnostics, Inc.



Has your company demonstrated extraordinary environmental efforts this year? If so, apply for an NBC Environmental Merit Award! Download an application form at [www.narrabay.com](http://www.narrabay.com).

Vincent J. Mesoletta, *Chairman* • Raymond J. Marshall, P.E., *Executive Director*  
One Service Road, Providence, RI 02905 401-461-8848 • [www.narrabay.com](http://www.narrabay.com)



# PUBLIC NOTICE

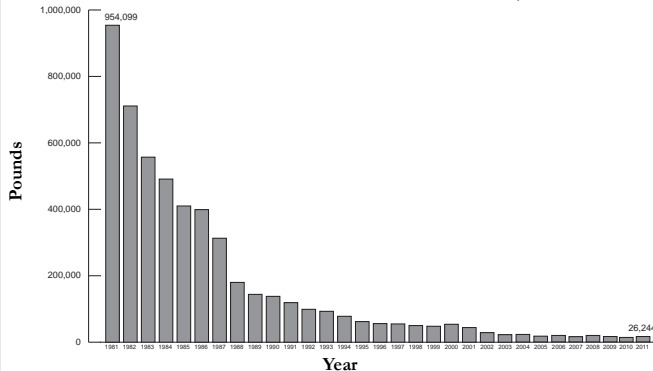
## Firms in Significant Non-Compliance

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 C.F.R. 403.8(f) (2) (vii) and Article 10 of the Narragansett Bay Commission, Rules and Regulations require the NBC to publish annually the names of all industrial users in Significant Non-Compliance (SNC) with pretreatment standards and other pretreatment requirements during the preceding year. Companies deemed to be in Significant Non-Compliance are those industrial users who have violated any of the Significant Non-Compliance criteria listed, as defined by Article 2 of the NBC Rules and Regulations during the time period from October 1, 2010 through December 31, 2011. The parameter for which a company was not in compliance and/or the specific administrative deficiency are listed after the company name. The number(s) in parentheses correspond to the type of SNC criteria specified below. Some of the firms listed below may have been issued an Administrative Order in which administrative and/or civil penalties may have been assessed. Many of the companies listed have made significant progress toward correcting the violation and may now be in compliance.

**Significant Non-Compliance Criteria:**

- (1) Chronic violations of wastewater discharge limits, defined here as those in which 66% or more of all of the measurements taken during a six-month period exceed (by any magnitude) a numerical Pretreatment Standard or Requirement for the same pollutant parameter;
- (2) Technical Review Criteria (TRC) violations, defined here as those in which 33% or more of all the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of a numerical Pretreatment Standard or Requirement multiplied by the applicable TRC value (TRC = 1.4 for BOD, TSS, fats, oil, and grease and 1.2 for all other pollutants except pH);
- (3) Any other violation of a pretreatment effluent limit (daily maximum or long-term average) that the Commission determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of Commission personnel or the general public);
- (4) Any discharges of a pollutant that has caused imminent endangerment to human health, welfare or the environment or has resulted in the Commission's exercise of its emergency authority to halt or prevent such a discharge;
- (5) Failure to meet, within 90 days after the scheduled date, a compliance milestone contained in a Commission notification, permit or enforcement order, for starting construction, completing construction or attaining final compliance;
- (6) Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, self-monitoring compliance reports and reports on compliance with compliance schedules;
- (7) Failure to accurately report noncompliance;
- (8) Any other violation or group of violations which the Commission determines has adversely effected the operation or implementation of the Industrial Pretreatment Program. •

**Total Metals Influent to Field's Point WWTF, 1981-2011**



THE NARRAGANSETT BAY COMMISSION IS COMMITTED TO PROTECTING THE STATE'S TWO LARGEST WASTE-WATER TREATMENT FACILITIES AND NARRAGANSETT BAY FROM TOXIC DISCHARGES. This is accomplished by the issuance of discharge permits to commercial and industrial sewer users. These discharge permits specify the level of pollutants that can be discharged in a facility's wastestream and may require a firm to conduct wastewater monitoring to verify compliance with discharge limits, to implement a Spill Control Plan and/or Toxic Organic/Solvent Management Plan, and to install pretreatment equipment. Various reporting and record keeping requirements may also be written into discharge permits. The firms listed in this public notice violated one or more of the significant non-compliance criteria specified above. The Commission is required by the RIDEM and the US EPA to annually publish the names of all firms violating any of these criteria. Therefore, firms must be sure to comply with all the terms specified in their discharge permit to ensure that the name of their firm is not listed in this annual public notice. The NBC offers FREE technical assistance to firms located in the NBC service area through its non-regulatory Office of Environmental, Safety & Technical Assistance. For information on how the NBC Environmental, Safety & Technical Assistance Program can help your firm achieve and maintain compliance, contact the Environmental, Safety & Technical Assistance Program Staff at 461-8848/TDD 461-6549.

Most businesses located in the NBC district are to be commended for the fine job they have done treating their process discharges to remove toxic pollutants. In 1981, local industries discharged 954,099 pounds of heavy metals such as copper, nickel and zinc and 80,440 pounds of cyanide to the Field's Point Wastewater Treatment Facility. Since 1981, the total metals and cyanide loadings to the Field's Point facility have been reduced by 97.2% and 98.2% respectively. Similar toxic loading reductions have been observed at the NBC Bucklin Point facility.

**Bucklin Point Service Area**

East Providence		
Company Name	Violations Cited	Present Status
Aspen Aerogels Rhode Island, LLC	Failure to submit reports on time (6)	Reports have been received.
Cumberland		
Ronald Pratt Company, Inc.	Cu (2)	Firm is now in compliance.

**Field's Point Service Area**

Providence		
Company Name	Violations Cited	Present Status
Precision Industries, Inc.	Failure to submit reports on time (6)	Reports have been received.
Crisloid, Inc.	Failure to submit report on time (6)	Report has been received.
North Providence		
Alpha Plating & Metallizing	Failure to submit reports on time (6)	Reports have been received. Firm is now out of business.

**The Narragansett Bay Commission will continue to be a leader in the field of wastewater treatment, environmental protection, and environmental education to ensure a cleaner Narragansett Bay for all to enjoy.**

Vincent J. Mesolella, *Chairman* • Raymond J. Marshall, P.E., *Executive Director*  
 Narragansett Bay Commission • One Service Road • Providence, RI 02905  
 401-461-8848 • TDD 401-461-6549 • FAX 401-461-6540 • <http://www.narrabay.com>  
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*The cost of this public notice will be billed to the firms listed above that were in significant non-compliance.*





















# ***NEWSLETTERS***



# NBC Pipeline

February 2012

NBC Pipeline is a monthly publication designed to keep Narragansett Bay Commission staff up to date on internal current affairs. Staff is welcome to forward to the Public Affairs Office any items they would like to share or see in a future publication. Your suggestions and participation are encouraged and appreciated.

## Calendar of Events *for February*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
			1	2	3	4	
					Payday		
5	6	7	8	9	10	11	
12	13	 Happy Valentines Day!	14 Colonial Life Benefit Info Mtg 7 AM : IM 11 AM: COB 2:30 PM: FP	15 Colonial Life Benefit Info Mtg 12:30 PM: BP	16	17	18
					Payday		
19	20	21	22	23	24	25	
26	27	28	29 10:30 a.m. Capital Projects Meeting 5:00 PM CAC				

*All meetings are held at the Commission's One Service Road Offices unless otherwise noted.*



**Turbine #2**  
 NBC's second wind turbine at FPWWTF is on the way up! Check out the progress daily at [narrabay.com](http://narrabay.com) and catch Michael Spring's awesome photos on the NBC's Facebook page and twitter feed. Photo by Michael Spring.

# News Briefs...

## Sweets for your Sweetie

In honor of Valentine's Day, the AA/EEO Committee has two delicious sweet treats for you to add to your dessert-making repertoire!

### GERMAN CHOCOLATE FUDGE

#### Ingredients:

14 ounces crumbled chocolate cake (about 3 cups)  
1.5 cups heavy cream, divided  
½ stick (4 tbs) butter, cut into small pieces  
½ cup packed brown sugar  
2 egg yolks  
½ tsp. vanilla extract  
½ cup shredded coconut  
½ cup chopped pecans



#### Directions:

Prepare a 9x9 pan by lining it with aluminum foil and spraying the foil with nonstick cooking spray. Place the crumbled cake into a large bowl and set aside.  
Place the chocolate chips into a small heat-safe bowl and set aside.  
Pour 1 cup of cream into a small saucepan and heat it over medium heat until simmering. Bubbles should form around the edges of the pan, but do not allow the cream to come to a full boil. Pour the hot cream over the chopped chocolate and let it sit for one minute to soften the chocolate. Whisk the chocolate and cream until the mixture is smooth, glossy and liquid. This is your "ganache".  
Pour half of the ganache over the crumbled cake and quickly stir to evenly coat the cake. Scrape the cake into the prepared 9x9 pan and press it gently into an even layer. Place the cake into the refrigerator to set while you prepare the second layer and set aside the second half of the ganache for later use.  
Place the egg yolks in a small bowl and set nearby. Combine the butter, ½ cup of cream and the brown sugar in a small saucepan over medium heat, stirring until the butter and sugar are melted. Heat the mixture almost to boiling, stirring occasionally.  
Once the hot cream mixture is almost boiling, pour ½ cup of it into the egg yolks and whisk vigorously, slowly pour the yolk mixture back into the hot cream, stirring constantly, and reduce the heat. Whisk constantly until it is thickened but do not allow it to boil. Once thick, remove the pan from the heat and stir in the coconut and pecans. Allow it to cool for 10 minutes at room temperature.  
Once the coconut-pecan topping has cooled to room temperature, pour it on top of the cake mixture and smooth it into an even layer.  
Stir the remaining ganache to ensure it is liquid and easy to pour. If necessary, reheat it in the microwave for 10-15 seconds so that it is smooth and flows freely. Pour the ganache on top of the coconut-pecan layer and spread it into a smooth, even layer.  
Refrigerate the fudge to set all of the layers, at least 3 hours or overnight. To serve, cut the fudge into 1-inch squares and place in paper candy cups. For best taste and texture, allow the fudge to sit at room temperature for 20 minutes before serving. Store fudge in an airtight container in the refrigerator for up to 12 days.

### TRES LECHES DESSERT (3 MILKS CAKE)

Recipe Submitted by: Rafael Cuello

#### Ingredients:

CAKE  
6 eggs, separated  
¾ c. sugar  
1 c. flour  
SYRUP  
1 can evaporated milk  
1 can condensed milk  
1 cup heavy cream or whole milk  
TOPPING  
3 egg whites  
3 tbs. sugar

#### Directions:

CAKE  
Preheat oven to 375 degrees F. Grease and flour a 9x13 in. pan.  
Beat the egg whites in a clean metal bowl until stiff peaks form. For best results, use cold egg whites directly from the refrigerator.  
Beat the egg yolks and sugar in a separate bowl until it forms a creamy yellow mixture.  
Stir the flour and sugar together in another bowl.  
Add the egg yolk mixture to the dry ingredients and blend thoroughly by hand.  
Fold the whipped egg whites into the creamed mixture with large, gentle strokes.  
Spread the mixture evenly into the prepared pan.  
Bake at 375 degrees F for 30 minutes or until light brown and a toothpick inserted into the center comes out clean.  
Once the cake is ready, take it out of the oven and put it into a deep dish. Let cool slightly before adding the syrup.  
SYRUP  
Blend the evaporated milk, condensed milk and cream.  
Pour over the cake, making sure to cover it entirely.  
Refrigerate and cool completely.



## Welcome!



Mark Brasil  
Mechanic I, FPWWTF



Kara Palmisciano  
Customer Service  
Representative



Glenn Peterson  
Mechanic I, FPWWTF

## Congratulations...

To Rebecca and Harrison Songolo on the birth of their son William on January 4th. He weighed 7 lb. 2 oz.



## A Review of NBC Emergency Procedures

Staying up-to-date with NBC emergency preparedness and response procedures is always important. Whether that includes periodically reviewing NBC's Shelter-In-Place, Evacuation, Hurricane Preparedness or building-specific plans, all NBC employees should make a continuous effort to familiarize themselves with the proper chain-of-command associated with each written plan. Remember - an emergency situation can be localized to a specific area/building of NBC, or it could easily affect multiple sections of the company. The possibility of an emergency situation within the Port of Providence always remains a possibility, and for this reason it is especially important to review emergency evacuation routes and Shelter-In-Place locations.

NBC supervisors are encouraged to review current emergency plans with their employees. These plans and procedures are easily accessible under the BayNet "General Info > Health & Safety Info tab.

### February EH&S Training:

(obtain supervisor's permission and please register through BayNet)

### Permit-required Confined Space Training:

- 2/2, 2/9, 2/15, 2/16, 2/21, 2/27

### CPR/AED & Basic First Aid Training:

- 2/22



# NBC Pipeline

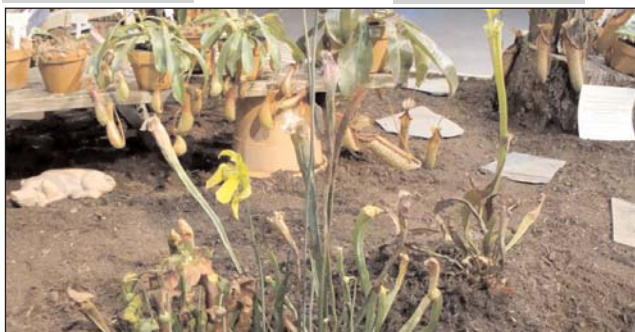
March 2012

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## Calendar of Events *for March*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
					Payday	
4	5	6 11:00 AM Board of Commissioners Meeting	7	8	9	10
11	12	13	14	15	16	17  Happy St. Patrick's Day!
18	19  Happy St. Joseph's Day!	20 8 AM & 1 PM Healthy Back /Preventing Slips and Falls Class	21	22	23	24
25	26	27	28	29	30	31
					Payday	

*All meetings are held at the Commission's One Service Road Offices unless otherwise noted.*



**Award Winning Green!**  
Some of the carnivorous plants John Lombardi grows at Field's Point were displayed as part of an Award Winning vignette at the Rhode Island Flower Show.

*Congratulations John!*



# News Briefs...

## The Soda Bread vs Zeppole Smackdown

It's St. Patty's Day versus St. Joseph's Day in a baked good extravaganza, courtesy of the AA/EEO Committee.

### IRISH SODA BREAD

In the United States, "Irish soda bread" generally means a somewhat sweet white bread made with eggs and butter and studded with raisins and caraway seeds - the "soda" in the name comes from the baking soda (or "bread soda" in Ireland) used to leaven it instead of yeast and kneading. This recipe has been handed down from Ellen Schwab, a beloved retired NBC employee.



*Ahh March, my favorite month, not only does it herald in spring and my birthday and a few others (Ray, Joanne, Terry and Amy); it also brings two favorite holiday recipes.*

*It's simply not St. Patrick's Day (March 17) without this old favorite.*

2 Tbs. Butter  
3/4 cup sugar  
Cream these two ingredients together

Beat in 1 egg

Add: 1 tsp. either vanilla or lemon extract

Stir in:  
4 Tsp. Baking Powder  
3 Cups Flour  
1 Cup Milk

Optional:  
1/2 cup raisin or currants  
Caraway seeds to taste

Spread in greased bread pan. Sprinkle a little sugar on top. (My son Chef Myles uses green decorative sugar for a festive touch).

Bake for one hour at 350.

Delicious served warm and with butter!! Enjoy!  
Submitted by Claudette Kalf

### ZEPPOLE

*These baked St. Joseph's Day fritters (March 19)-also known as St. Joseph's Cream Puffs-are an old tradition from Naples in southern Italy. The same sweet is made by Sicilians, but they dip them in honey and call them sfince.*

1 cup water  
1 cup (2 sticks) butter  
1/4 teaspoon salt  
1 cup all-purpose flour  
4 eggs  
1 tablespoon sugar  
1 tablespoon grated lemon rind  
1 teaspoon grated orange rind  
Ricotta cream filling (recipe follows)  
or custard cream or whipped cream  
18 maraschino cherries  
1/2 cup glazed orange peel slices



Preheat oven to 400 degrees.

In a large saucepan, combine the water and butter, and bring to a boil. Add the salt and flour, stirring constantly until the mixture leaves the sides of the pan to form a ball in the center. Remove from heat and allow to cool.

Add the eggs, one at a time, beating them in completely. Add the sugar, lemon rind, and orange rind. Mix well.

Drop by the tablespoon onto a baking sheet, placing the puffs three inches apart, or use muffin cups. Bake for ten minutes, then reduce the heat to 350 degrees and bake for thirty minutes or until light brown. Remove the puffs from the oven. Open the puffs immediately to allow steam to escape. Cool.

Fill the puffs with Ricotta cream, custard cream, or whipped cream. Top with a cherry and two thin slices of glazed orange peel.

### Ricotta Cream Filling

1 pound ricotta cheese  
2 tablespoons grated chocolate  
1 tablespoon grated orange rind  
Sugar, to taste  
2 teaspoons almond extract  
3 tablespoons milk

In a bowl combine all ingredients, adding only enough of the milk to make a smooth custard like mixture. Refrigerate until needed.

Makes eighteen cream puffs.

Or you can do what I do and pick some up at Lasalle Bakery or Wright's Farm Bakery.

Submitted by Claudette Kalf

## Congratulations...

To Dave Brouillard, whose daughter Jamie was promoted to Commodity Manager for North American Implants Strategic Sourcing at Stryker Endoscopy in San Jose, CA.

To Claudette Kalf on the birth of her grandson Julian, 7 lbs 8 oz, on Feb 16th.



## Keen eyes, quick thinking

On Tuesday, February 21st, while conducting routine river bacteria samples to aid in satisfying NBC's nine minimum controls requirements, Michael Golenia observed a milky-looking plume in the West River.

Tracking this plume upstream, he soon discovered the cause to be a dry weather overflow (DWO). IM was promptly notified, and the discharge was stopped. The DWO originated from a privately owned sewer line. NBC is working with the City of Providence to prevent a recurrence. Great work Michael on your alertness and following-up on your observations!

*submitted by John Motta*



## March is National Workplace Eye Health & Wellness Month

Prevent Blindness America, the nation's leading volunteer eye health and safety organization dedicated to fighting blindness and saving sight, has designated the month of March as "National Workplace Eye Health & Wellness Month."

The US Department of Labor estimates that nearly 1,000 eye injuries occur every day in American workplaces. The most common cause of eye injuries in the workplace involves flying particles - all the more reason for employees to make sure that their protective eyewear is designed for specific hazards that are or may be encountered and also to ensure that eyewear is properly fitted at all times. Common hazards that NBC employees may be exposed to and receive training on include chemical splashes, flying debris from powered tool operations, airborne particulates such as sand and dust, and working in close proximity to raw or partially treated wastewater.

NBC employees receive training on proper Personal Protective Equipment (PPE) use and maintenance on a regular basis, and it is important to remember that each employee is responsible for the proper use and maintenance of their own PPE. Additionally, NBC employees are encouraged to take part in a brief, informative and non-mandatory 20 minute safety course called "Eye and Face Protection," which is available on NBC's Online University. For those employees who have forgotten their passwords to NBC's Online University, please call ext. 418. Supervisor permission is required before accessing NBC's Online University.

**March EH&S Training:** (obtain supervisor's permission; please register through BayNet)  
Permit-required Confined Space Training: 3/8 & 3/15

*submitted by David Aucoin*

## Walk for Health (and \$\$)!

NBC's second **Walk for Health Challenge**, scheduled to begin on April 2, 2012, is an exciting voluntary walking incentive program available to NBC employees

The 12-week program encourages you to increase physical activity on most days of the week. You'll receive a pedometer to record daily walking steps on the Walk for Health log sheet. At the close of the session, you will submit your log sheet, and if you have met the United Healthcare established goal, you will be eligible to receive a \$100 wellness incentive credit. The wellness incentive will appear in your paycheck as an offset to your medical copay deduction.

Those who completed the Walking Challenge which began in October 2011 and participate and complete the April 2012 Walking Challenge will receive their \$100 wellness credit after July 2012. All others will receive their wellness credit immediately following the event.

*submitted by Cecille Antonelli*



# NBC Pipeline

April 2012

NBC Pipeline is a monthly publication designed to keep Narragansett Bay Commission staff up to date on internal current affairs. Staff is welcome to forward to the Public Affairs Office any items they would like to share or see in a future publication. Your suggestions and participation are encouraged and appreciated.

## Calendar of Events *for April*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
			5:00 PM CAC Meeting			PASSOVER BEGINS
8	9	10	11	12	13	14
EASTER		11:00 AM Board of Commissioners Meeting			PASSOVER ENDS	
15	16	17	18	19	Payday	20
21	22	23	24	25	26	27
28	29	30			Payday	

*All meetings are held at the Commission's One Service Road Offices unless otherwise noted.*

### Walk for Health (and \$\$)!

NBC's second **Walk for Health Challenge**, began on April 2, 2012

The 12-week program encourages you to increase physical activity on most days of the week. Use your pedometer to record daily walking steps on the Walk for Health log sheet. At the close of the session, you will submit your log sheet (contact Deb Samson for an excel version), and if you have met the United Healthcare established goal, you will be eligible to receive a \$100 wellness incentive credit. The wellness incentive will appear in your paycheck as an offset to your medical copay deduction.

Those who completed the Walking Challenge which began in October 2011 and participate and complete the April 2012 Walking Challenge will receive their \$100 wellness credit after July 2012. All others will receive their wellness credit immediately following the event.



*submitted by Cecille Antonelli*

# News Briefs...

## Tom Uva's Easter Pie

*Easter pie or Pastiera, as it is known to many of us of Italian descent, is found all over Italy, but its origins are Neapolitan. Tender pasta frolla pastry pies filled with fresh ricotta cheese and rice, sweetened with sugar, were made in batches, wrapped in clear cellophane, and given away as Easter gifts. Many variations of this classic have survived, some of which use orzo (tiny pasta) in place of rice, and many add fruit such as pineapples or blueberries. Today's chefs usually cook a large rice pie instead of the traditional small pies that were given as Easter gifts. My Pastiera recipe differs from the traditional in that it does not have the pasta crust or contain fruit or ricotta cheese. You can pour the mixture into a pie crust or add your favorite fruit if you wish. I obtained this Italian Pastiera recipe from an elderly woman that I worked with when I was in college in the late 1970's.*

### Ingredients:

15 eggs  
2 cups of sugar  
3 tablespoons of flour  
2 - 3 tablespoons of vanilla  
1 cup of white rice (River Rice)  
1 quart of milk  
1 - 12 ounce can evaporated milk

### Directions:

Cook 1 cup of rice until the rice is cooked and thick. Add 1 quart of milk and 1 12 ounce can of evaporated milk to the rice and stir until well mixed. In a separate bowl, combine the 15 eggs with the 2 cups of sugar, 3 tablespoons of flour and 2 to 3 tablespoons of vanilla and mix thoroughly until the mixture is smooth and cream. Grease the pie plate and flour it well. Stir the rice and egg mixtures together and pour into the pie plate. This recipe will make two 12 to 14 inch pies or may be made into a larger rectangular pie. Bake at 350 degrees F for approximately 1 and 1/2 hours. You will know it is ready when the custard surface has solidified and turns golden brown around the edges. Enjoy!



## April is Distracted Driving Awareness Month

The National Safety Council (NSC) has designated the month of April as "Distracted Driving Awareness Month." The NSC estimates that about 25% of all car crashes involve cell phone use. In an effort to further increase the public's awareness on the amount of fatalities that occur every year due to cell phone usage while driving, the NSC has launched an aggressive campaign to encourage drivers to take an online pledge to avoid using their cell phones while driving. Pledges can be personally dedicated to a family member or friend who has passed away as a result of cell phone use while driving. The NSC has also released a new Public Service Announcement video titled "One Call Can Change Everything." The video is available for viewing at the following link:  
<http://www.youtube.com/watch?v=UKCh4BHvXSQ&list=UUDg4fNH44UIqfRbLgNpy5Lw&index=5&feature=plcp>

NBC employees are currently required to adhere to all safety guidelines set forth in NBC's Safety Procedures When Operating Motor Vehicles: Seatbelt, Texting & Smoking Policy (G-V-4). Employees are encouraged to review this policy, which is available on the BayNet system. Currently in RI, texting while driving is illegal, but legislation to ban full cell phone use while driving has yet to be passed.

## April EH&S Training: (obtain supervisor's permission; please register through BayNet)

Lockout/Tagout Classroom Training:

4/3 & 4/4 at FP  
4/10 & 4/11 BP

*submitted by David Aucoin*

## Congratulations...

To Assistant Operations Manager, Paul Desrosiers, who was recently appointed to the Board of Certification of Wastewater Treatment Facility Operators by Governor Lincoln Chaffee. Paul will be the board representative for the Narragansett Water Pollution Control Association, RI's Wastewater Operators' association.

To Chairman Vincent Mesolella on the birth of his granddaughter Bianca Rose



## Macros in the News

The fourth graders at SD Barnes School in Johnston created a newsletter about their macroinvertebrate lesson with NBC Environmental Educator Cynthia Morissette. We laud the journalistic endeavors of these young environmentalists!

Narragansett Bay Commission Macro-Invertebrate Posters

Written by Tonya Ketchel

A teacher named Mrs. Morissette from Narragansett Bay Commission comes in one Friday each month. She teaches us about the Woonasquatucket River Watershed area.

We learn about what is good and bad for our environment and how we can help make a change.

Recently she gave us an assignment to do with a group. The groups were based on macro-invertebrates. Each group had a snail, dragonfly, crayfish, leech, or caddisfly. We researched all about our critter, and then created poems describing them. The finished posters that the groups did were amazing! We had a lot of fun making them with our friends.

Note: The types of macro-invertebrates found in water help to tell the overall health of the water. There are three pollution tolerance levels. When we visit Goyanese Mill Pond in April, we'll discover which types of macro-invertebrates are in



# NBC Pipeline

May 2012

NBC Pipeline is a monthly publication designed to keep Narragansett Bay Commission staff up to date on internal current affairs. Staff is welcome to forward to the Public Affairs Office any items they would like to share or see in a future publication. Your suggestions and participation are encouraged and appreciated.

## Calendar of Events *for May*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
 6 Mother's Day	7	8	9 5:00 PM CAC Meeting	10	11 Payday	12
13	14	15 11:00 AM Board of Commissioners Meeting	16	17  WWE Conference	18	19
20	21	22	23	24 Environmental Merit Awards	25 Payday	26
27	28  MEMORIAL DAY	29	30	31		

*All meetings are held at the Commission's One Service Road Offices unless otherwise noted.*

### 30 Years of Excellence

May 2, 2012 is the thirtieth anniversary of the day the NBC took over operation of the Field's Point WWTF from the City of Providence. In those three decade, the facilities has gone from being an environmental failure to being an unqualified success. Stay tuned for our plans to celebrate this and other milestones this fall.

Here's an early photo of the NBC crew. Four people are still valued members of our NBC staff. Can you find any of them?

Congratulations to Carmine Goneconte, Ralph Ruggiano, Peter Trombetti, and Ed Viveiros on 30 Years with the NBC!



# News Briefs...

## Italian Wedding Cookies (Butterballs)

--from Junel Decena

### Ingredients:

- 1 cup butter
- ½ cup confectioner's sugar plus more for dusting
- ½ teaspoon. salt
- 1 cup finely chopped nuts (usually walnuts but almonds or pecans are good too)
- 1 tsp. vanilla extract
- 2 - 2 & ¼ cups sifted all purpose flour

### Directions:

Preheat your oven to 350° F. Cream the butter in a mixing bowl. Gradually add the sugar and salt and beat until light & fluffy. Add the nuts and the vanilla extract; mix well. Blend in flour gradually and mix thoroughly.

Refrigerate for a few hours so the dough can firm up a bit and is easier to handle (even chilled, this will be soft dough). Shape into teaspoonful sized balls and place about an inch apart on an ungreased cookie sheet. Bake at 350° for 15-20 minutes. The cookies should be a light golden color: soft, but firm.

Sift some confectioner's sugar on wax paper. Place the (hot, just from the oven) cookies on the wax paper and sift confectioner's sugar over each to coat.



## Congratulations...

To Dennis aRusso, who, on April 18, fired a hole-in-one on the 153 yard par three seventeenth hole at the Richmond Country Club. His feat was witnessed by playing partners Richard Bernier and Paul Desrosiers.

To Congratulations to Joanne Parker on the birth of her granddaughter, Hannah Lee, born April 21, 2012. She weighed 8lbs 14oz. and was 21 inches long.



## NBC Receives Numerous Honors

Numerous NBC departments and individuals have recently received honors from local and national organizations for excellence. Congratulations to:

**Top photo: Field's Point WWTF for the EPA Region I Excellence Award!** *Pictured, r to l: Executive Director Ray Marshall, Gary Cook, Mike Salvatore, Chairman Vincent Mesolella, George Dolan, James Proulx, Steven Morelli, Jr., and Ansumana Sirleaf.*

Bottom photos, l to r: *Joe LaPlante, recipient of a special award from the New England Water Environment Association (NEWEA) for significant contributions to the profession; Steve Cote recipient of the NEWEA Operator Safety Award; A&F staff for the 9th Government Finance Officers Association Distinguished Budget Presentation Award; Pam Duckworth, Karen Giebink, Sherri Arnold.*



## NBC Wins Wellness Award

NBC is the recipient of the Exemplary Worksite Health Award, the highest level award for the 2012 Annual Worksite Health Awards from the Greater Providence Chamber of Commerce and Blue Cross & Blue Shield of RI. NBC, along with 83 other RI businesses and organizations, will be listed in a special insert focused on recipients of the Worksite Health Awards in the May "Top Docs" issue of *Rhode Island Monthly* for their exceptional efforts directed toward improving the health and well-being of employees across the Ocean State.

Congratulations to Cecille Antonelli, Brenda Smith, Kristen Petit, and Crystine Marandola for their award winning efforts!





# NBC Pipeline

June 2012

NBC Pipeline is a monthly publication designed to keep Narragansett Bay Commission staff up to date on internal current affairs. Staff is welcome to forward to the Public Affairs Office any items they would like to share or see in a future publication. Your suggestions and participation are encouraged and appreciated.

## Calendar of Events *for June*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3	4	5	6	7	8	9
10	11	12  BLOOD DRIVE	13 5:00 PM CAC Meeting	14  Flag Day	15 Payday	16
17  Father's Day	18	19 11:00 AM Board of Commissioners Meeting	20  5:00 PM Gallery Show at BVTC	21	22 Payday	23
24	25	26	27	28	29	30

*All meetings are held at the Commission's One Service Road Offices unless otherwise noted.*

### NBC Maintains Excellent Credit Rating

Standard & Poor's Ratings Services affirmed its Standard & Poor's underlying rating (SPUR) on Narragansett Bay Commission's (NBC) revenue bonds as 'AA-.' The rating was upgraded from 'A+' based on the Commission's sound financial performance and large and diverse service area in 2008.

Standard and Poor's cited the NBC's access to low-interest state revolving fund debt, and rates that remain competitive despite recent increases as rational for reaffirming the NBC's rating. Currently the NBC has one of the highest credit ratings of any quasi-governmental agency in Rhode Island.

According to Standard & Poor's, NBC's system liquidity remains strong, which will stand the NBC in good stead to meet the funding requirements of current and upcoming capital projects: phases two and three of the combined sewer overflow remediation, and nitrogen removal at the NBC's two treatment plants.

Congratulations to **Karen Giebink and the entire A&F staff**, as well as the Board of Commissioners, for their excellent strategic financial management!



# News Briefs...

## Leche Flan

Leche Flan is a traditional Filipino recipe much like a Spanish type flan. It is always a big hit at the holidays. --from *Nora Lough*

### Ingredients:

#### FLAN

- 6 egg yolks
- 2 eggs
- ¾ cup sugar
- 1 and ½ cup fresh milk

#### CARAMEL

- ½ cup sugar
- 2 tablespoons water



### Directions:

In a ½ gallon pan, caramelize sugar and water until golden brown. Turn caramel around pan to coat sides evenly. In a bowl, combine flan ingredients and mix thoroughly with a whisk. Strain mixture into prepared pan. Cook in a double boiler for 40 minutes until firm. Cool and keep in the refrigerator for a few hours. Invert into a deep serving dish.

--Submitted by *Tony Dalmaçzi*

## Good Show!

Maintenance Supervisor **Mike Spring** and Mechanic II **Joe Crosby** joined other operators from Rhode Island to represent the Narragansett Water Pollution Association - RI Chapter on the Operations Challenge Team at the New England Water Environment Association (NEWEA) Spring Conference in Newport this week. Although their team did not take home the trophy (the title went to the Vermont team), hopes are high for a win next year. Congratulations to the participants!



--Submitted by *Carmine Goneconte*

## Beautiful and Functional!

IM recently scored two coups for aesthetic effect and environmental protection: the recently-painted structure at BVI 9 (gorgeous!) and a reconstructed manhole at Sheridan Street. In May, a dry weather overflow occurred at Sheridan Street when the manhole was vandalized. The new manhole cover has additional locking bolts to deter future tampering.



## Congratulations...

To **Kimberly Kirwan**, who received her Masters degree in Marine Affairs from URI on May 19!



To **Jean Barnes**, on the birth of her granddaughter Milania Rose!



To **Cynthia and Brien Morissette**, on the birth of their tadpole, Kalionna Lou!

To **Christine and Lance Comeau**, on the birth of their baby girl, Sarah Jean!



To **David and Holly Aucoin**, on welcoming baby boy, Nathan Wayne!

To **Ray Marshall**, on the birth of his grandson, Jackson! (Photo coming soon!!)

...and, last but not least, to **Tom Uva and the PP&R team**, whose poster "Achieving Water Quality Standards by Implementing Sustainable Estuarine Habitat Restoration and Aquaculture Projects," has been accepted into the program of the 6th National Conference on Coastal and Estuarine Habitat Restoration. **Great job!**

## June is National Safety Month

The National Safety Council (NSC) designates each June as “National Safety Month” in an effort to raise public awareness of preventable injuries and fatalities throughout the country. Driver safety remains a critical safety issue among all companies and their employees. As the warm weather approaches, pedestrian traffic increases, and so does the increase in traffic flow on area roadways, often times resulting in speeding, aggressive & distracted driving. Employees are encouraged to recognize the fact that driving is one of the most dangerous activities that a person can engage in on any given day. Please drive carefully along our access roads and within our facilities to ensure everyone’s safety.



The NSC provides free driver safety fact sheets and quizzes on its website at [www.nsc.org](http://www.nsc.org), and NBC employees can also further educate themselves by taking advantage of the numerous driver safety classes available on NBC’s Online University. “Defensive Driving” and “Avoiding Collisions” are two such classes that are interactive and entertaining. Additionally, optional Defensive Driver Classroom training is offered on-site once/year to NBC employees through Beacon Mutual Insurance.

Some of the many benefits of driving safely include:

- Lower insurance premiums,
- A ‘cleaner’ driving record,
- Protection of pedestrians (such as those involved with NBC’s Walking Wellness Program), and
- Compliance with state and local speed limits (In RI, for roads that don’t have any speed limit signs posted, such as Ernest St. and Service Rd., the speed limit is automatically 25 MPH)

### Safety Training:

Safety & health training classes for June will soon be posted on the BayNet calendar and applicable managers will be notified. As always, please obtain your supervisor's permission before registering for any safety training class.

--Submitted by David Aucoin

### New Benefit Info on Baynet



Both medical and dental rates will increase effective July 1, 2012. The new rates as well as employee co-share information can be accessed on Baynet by selecting Benefits, then Health, Dental and Vision.

Also, in the same location is an outline of NBC’s 2012 Wellness Incentive Program which defines ways you can earn up to \$400 in wellness incentive credits for 2012 (July 1, 2012 - June 30, 2013).

--Submitted by Cecille

Antonelli

### Those Steps Really Add up!

Since we NBC employees began counting our steps in the Walking for Wellness program, we have taken over 18 MILLION steps!



### Happy Retirement

Over 80 employees joined in to toast IM’s Dennis Place and Hector Galvan on their retirements. Dennis received a toy truck and a golden plunger as mementos of the NBC and Hector received a basket full of snacks. Good luck to Dennis and Hector!

## Once Upon a Time...

In April, IM’s **Anthony Ciccirelli** volunteered as storyteller for his son’s school class, reading “Danny the Dinosaur.” The students were so impressed with his narrative skills that they sent him a slew of their own illustrations from the story as a gift!



Top to bottom: Anthony Ciccirelli with his “thank you” gift; playing softball with a dinosaur; drinking a soda with a dinosaur; riding on a dinosaur.



## 500 Junior Scientists Join NBC for Annual Woon Watershed Explorers Conference



On May 17, 500 local elementary school students who have taken part in the NBC's Woon Watershed Explorers Program, converged at Goddard Park for the WWE's year-end Environmental Education Conference.

It was a gorgeous day and the young scientists enjoyed clean water activities where they learned about marine animals, microscopes, and protecting our environment.

Despite the fact that Cynthia Morissette, program coordinator, was on maternity leave, the day went off without a hitch, due entirely to the Herculean efforts of **Crystine Marandola**, who pinch-hit for Cynthia that day, and a cadre of dedicated NBC volunteers. Many thanks to: Rich Bernier, Linda Giesinger, Carmine Goneconte, Paul Desrosiers, Anthony Ciccirelli, Jamie Cook, Brian Steere, Tony Dalmazzi, Katherine Archambault, Nora Lough, Ralph Ruggiano, Claudette Kalf, Catherine Oliver, Laurie Horridge, Jennifer Harrington, Elaine DelRossi, and Christine Comeau.



Special thanks also to **Carmine Goneconte**, who led WWTF tours for Cynthia! Carmine received a special set of thank you letters from Nathanael Green Elementary School, in which the students lauded him for being "really cool," "so smart," and "fastenating"!



### Shellfish Transplants Again Successful

Big kudos to **Kimberly Kirwan** for coordinating NBC's participation in the annual Shellfish Transplant. Over the course of the three transplants, an average of 15 shellfishermen participated in each event to relocate 89,400 pounds of quahogs from polluted areas to cleaner waters in various management areas and sanctuaries around the state of Rhode Island.



# NBC Pipeline

August 2012

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## Calendar of Events *for August*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>Thank You</b> To everyone who participated in the blood drive on June 7. The RI Blood Center received 11 pints of blood which will help save 27 lives.			1	2	3	4
5	6	7	8	9	10 Payday	11
12	13	14	15	16	17	18
19	20 Victory Day HOLIDAY	21	22	23	24 Payday	25
26	27	28	29	30	31 Payday	

*All meetings are held at the Commission's One Service Road Offices unless otherwise noted.*

### FPWWTF & BPWWTF Win NACWA Silver Awards

Both the Field's Point and Bucklin Point WWTFs received a Silver Peak Performance Award from the National Association of Clean Water Agencies (NACWA) recognizes public wastewater treatment facilities for their outstanding compliance records in the 2011 calendar year. NACWA was proud to recognize over 440 Peak Performance Award facilities during the Association's 2012 Summer Conference and 42nd Annual Meeting, held July 15-18, 2012 in Philadelphia, Pennsylvania. The Silver Award certifies that neither facility experience more than five NPDES permit violations in calendar year 2011. Congratulations to all!



# News Briefs...

Mark Your Calendars!



Several wellness events are on the horizon:

- Free Flu Shot Clinics are scheduled for October 2, 2012 at FP, COB and BP
- United Healthcare Know Your Numbers Event is scheduled for November 4, 2012 at the COB - Obtain Blood Pressure, Cholesterol and Body Mass Index Screening at the on-site Health Fair\* and receive a \$100 Wellness Incentive Credit.

*\*Certification of physician consultation is required if screening is completed at physician's office or if results obtained at the on-site Health Fair do not meet the guidelines.*

- Eat This/Not That Event - scheduled for October 10, 2012 at FP; and October 16th at BP - Learn to make healthier choices at restaurants and the grocery store.

And don't forget to pick up fresh fruits and vegetables every Tuesday, 10am - noon at the COB!

*--Submitted by Cecille Antonelli*

## Now That's a Nice Shoreline!

The north berm (facing Pawtucket) at Bucklin Point was recently replaced as a part of BPWWTF's ongoing upgrades. The new shoreline provides protection against erosion.



## What a Catch!

Congratulations to Ed Taylor, on his massive catch in June!



Welcome!



Michael Ceasrine,  
Mechanic I at Field's  
Point

Congratulations...

To **Peter Trombetti**, O&M Supervisor, who celebrated his 40th anniversary as an employee of the Field's Point WWTF on Saturday June 9, 2012. Peter began working at the plant for the City of Providence on June 9, 1972 when he was 19 years old. And he hasn't aged a day since then!

To **Robin Christensen**, Operator II at BPWWTF, who welcomed grandson Landon James Baris on June 14 at 10 lbs., 2 oz!

To **Mike Spring**, FPWWTF Maintenance Supervisor, who received the Robert J. Markelewicz Award from the Narragansett Water Pollution Control Association (NWPCA). This award is given once a year by the NWPCA for outstanding contribution to wastewater treatment systems maintenance.



To **Jeffrey Tortorella**, EMDA Monitoring Field Supervisor. After 30 plus years of operating boats, Jeff qualified for a 100 ton Master Near Coastal license from the US Coast Guard. He attended 80 hours of classroom work in February of this year, and spent a lot more of his personal time studying the US Coast Guard Rules of the Road. Jeff passed all 4 parts of the arduous exam on his first attempt: quite an accomplishment.

*Thanks to Carmine Goneconte, Paul Nordstrom, Eddie Viveiros, and John Motta who clued us into these great accomplishments.*

## Work Safely to Prevent Heat Illness

The summer months and extreme temperatures have now arrived. It is important for NBC employees to remember that working outdoors in hot and humid conditions greatly increases the chance of exposure to heat illness, which can be deadly. Heat illness can range from heat rash and heat cramps to heat exhaustion and heat stroke. Heat stroke can result in death and therefore always requires immediate medical attention.



OSHA has recently launched an aggressive nationwide outreach campaign to raise awareness among workers and employers about the hazards of working outdoors in hot weather. Employees are encouraged to remember and follow the actions below while working outdoors in hot weather:

- Drink water often
- Report heat symptoms early
- Periodically rest in the shade
- Know what to do in an emergency

It is also important for employees to make sure they gradually increase their workloads and take more frequent breaks as they allow their bodies to become acclimated to hot weather.

With their supervisor's approval, NBC employees may visit the new OSHA Heat Illness Prevention website at <http://www.osha.gov/SLTC/heatillness/index.html> for more information, including a link to OSHA's new Heat Safety Tool app for smartphones. This free app allows employees and supervisors to calculate the heat index for their worksite and the subsequent level of risk posed to employees working outdoors

*--Submitted by David Aucoin*

## Having a Field Day

In June, IM's **Anthony Cicciarelli's son Ethan** was featured in the Valley Breeze and Observer taking part in his school's field day activities. Did Dad teach him his sweet hula hooping skills?



## NBC Celebrates Governor's Bay Day

On July 29th, PP&R staff represented the NBC at the Governor's Bay Day, which was held at India Point Park. Bay Day is a statewide event celebrating Rhode Island's greatest resource, Narragansett Bay! The India Point Park portion of the day was highlighted by many wonderful bands, free food, sail boat rides and many educational exhibits by local environmental organizations. The NBC booth was unique and well received by the public. Staff displayed NBC's high-tech environmental monitoring equipment and explained to the interested public how the equipment is utilized to evaluate and protect the health of the Bay. The NBC also showcased the "Snapshot of Upper Narragansett Bay" water quality website, along with pictures, posters and handouts explaining the various aspects of the NBC construction projects and comprehensive receiving water monitoring program. The highlight of the NBC booth was the marine life living under the India Point dock which was captured live by the NBC underwater camera. Flounder, silver sides and crabs were the stars of the show! Special thanks to our IT and Public Affairs Sections for their help preparing for this event.



*--Submitted by Pamela Reitsma*





# NBC Pipeline

September 2012

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## Calendar of Events *for September*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2	3	4	5	6	7	8
	Labor Day HOLIDAY					
9	10	11	12	13	14	15
				NBC Golf Tournament	Payday	
16	17	18	19	20	21	22
	GPS Investment Advisors one-on- one meetings		5:00 PM Citizens Advisory Committee Meeting			
23	24	25	26	27	28	29
		11:00 AM Board of Commissioners Meeting			Payday	
30						

*All meetings are held at the Commission's One Service Road Offices unless otherwise noted.*

### Health & Wellness Events

- Free Flu Shot Clinics are scheduled for October 2, 2012 at FP, COB and BP
- United Healthcare Know Your Numbers Event is scheduled for November 4, 2012 at the COB - Obtain Blood Pressure, Cholesterol and Body Mass Index Screening at the on-site Health Fair\* and receive a \$100 Wellness Incentive Credit.

*\*Certification of physician consultation is required if screening is completed at physician's office or if results obtained at the on-site Health Fair do not meet the guidelines.*

- Eat This/Not That Event - scheduled for October 10, 2012 at FP; and October 16th at BP - Learn to make healthier choices at restaurants and the grocery store.



# News Briefs...

## Mark Your Calendars!



Another Walking for Fitness Program is scheduled to begin on September 10, 2012. The program will run for 10 weeks and is designed to promote and increase the amount of physical activity that employees engage in on a daily basis. Once the program begins, you will be given a pedometer and log sheet to record your daily walking steps. Everyone is invited to participate, however wellness incentive credits will apply as follows:

If you participated in the last two walking challenges and received a \$100 wellness credit for both, you are not eligible for the \$100 wellness incentive credit (you have received credit for two Wellness Incentive Program plan years).

If you participated in one walking challenge and received a \$100 wellness credit for just the one, you are eligible for the \$100 incentive credit (you have received credit for one Wellness Incentive Program plan year).

### Kick-off Meeting Details

COB, Board Room	September 10, 2012	10:15 am - 11:15 am
Bucklin Point	September 10, 2012	12:30 pm - 1:30 pm

If you're interested in joining the program, please call Kristen at ext. 371 to sign up.

--Submitted by Cecille Antonelli

## Walk to Find a Cure for Breast Cancer



On October 7, Renee Rinaldi Patterson, Fiscal Clerk, Customer Service, will walk as a member of the team GLORIA'S GEMS in the Gloria Gemma 5K in Providence. If you would like to join Renee's team or make a donation to her team, please call or email Renee.

The Gloria Gemma Breast Cancer Resource Foundation was established in 2004 to raise breast cancer awareness, increase breast health education, and generate funding for critical breast health programs. 100% of the Foundation's net proceeds will remain right here in Rhode Island. In 2010, 2011 and 2012, the NBC Casual Day Fund has donated to the GGBCRF.

Chances are you or someone you know has been affected by breast cancer. The simple facts are that one in eight women will be diagnosed with this disease in her lifetime and one woman dies from this disease every 12 minutes in the U.S. If breast cancer is detected in its early stages, the five-year survival rate is greater than 95%.

## Wind Turbine Switch Gear Arrives at FPWWTF



On Monday, August 27th the electrical transformers for the Narragansett Bay Commission's three 1.5 MW wind turbines were delivered to Field's Point. The three transformers, to be installed in early September, will convert the electricity generated by the wind turbines to a voltage usable at the Field's Point Wastewater Treatment Facility and during high winds exportable to the local grid. These are some of the final pieces of equipment needed to make the wind turbines fully operational.

## Welcome!



Jaime Overton,  
Financial Analyst

## Congratulations...

To **David Aucoin**, NBC Safety Compliance Coordinator for his recent appointment as Chairman of the Rhode Island Water/Wastewater Agency Response Network (RIWARN). The various members of RIWARN work together to give each other rapid mutual aid assistance during all forms of emergency situations such as floods and hurricanes as well as man-made incidents. As Chairman Dave will be working to increase RIWARN membership and will be helping to coordinate emergency response efforts between Rhode Island and other New England WARN organizations.

## Thank you!



I would like to express my acknowledgment for a job well done by Eddie Viveiros and the Bucklin Crew. Eddy has completed all the repairs and upgrades at BVI 9 with the assistance of the BP IM crew and as always you can see by the photos everything was completed to perfection. Many safety issues have been addressed thanks to the input of Dan Barlow and the Bucklin crew. I believe everyone, including Mrs. Lamb, would say the work came out great and all the upgrades will make this location a safe site to work. Again thanks Eddie V. and the BP crew.

Sincerely, Tony DiIorio

## September is National Preparedness Month

As September arrives, communities across the country will be promoting emergency preparedness at the state and local level in an ongoing effort to educate the public.

Whether natural or manmade, emergencies can strike suddenly and always have the potential to cause disruption to normal daily routines at home and at work.

Hurricanes are no exemption. AccuWeather.com is predicting a “near-normal” hurricane season for the Atlantic, which runs from June 1st through November 30th. A total of twelve tropical storms, five hurricanes and two major hurricanes (Category 3, 4 or 5) have been predicted for this season.

Although this year’s overall forecast is lower than 2011 numbers, officials are warning the public against embracing a false sense of security; the Federal Emergency Management Agency (FEMA) is continuing its effort to educate the public about the importance of preparing for emergencies by promoting the following basic steps through its Ready.gov campaign:

1. Get a KIT - This should include the basics for survival, and supplies should be adequate to last for at least three days.
2. Make a PLAN - At NBC, emergency preparedness plans are in place. While at home, NBC employees should discuss with their friends and family how they'll contact each other during an emergency, in addition to where they'll meet and what they'll do.
3. Stay INFORMED - - Learn about emergency plans that have been established in your area by your state and local government officials. Also, periodically check all types of media (web sites, newspapers, radio, TV, mobile and land phones) for local, national and possibly even global information. During a brief or extended power outage, access to news outlets can also be obtained from a battery-powered radio. If one is not available, remember that the radio in your car will work during a power outage.
4. Get INVOLVED - Obtain emergency response training and learn how to participate in community exercises, and volunteer to support your community's first responders. Also consider taking a class in CPR & Basic First Aid. These classes are periodically posted on the BayNet safety training calendar.

For access to more resources and detailed information, employees are encouraged to visit [www.ready.gov](http://www.ready.gov). A free Hurricane App is also available from the Red Cross, and can be previewed [HERE](#).

September EH&S Training:

Audiometric Hearing Tests (applicable employees) - 9/11 & 9/12

8 Hour Hazwoper Refresher Training (applicable employees) - 9/17 & 9/18

*---Submitted by David Aucoin*

## NBC Invests in Wellness

On June 30, 2012, NBC completed the first year of the Wellness Incentive Program and the results are very exciting. Take a look for yourself:

- 97 employees completed either the on-site health screening or were screened by their personal physician
- 7 employees completed the Weight Watchers program
- 135 employees completed the 12-week Walking for Fitness program
- 26 employees completed one or more of Unitedhealthcare's on-line coaching programs

Employees participated in total of 265 Individual Credit Incentives for a total dollar value of \$25,400!!

*--Submitted by Cecille Antonelli*



## Take Me Out to the Ball Game

IM Operator II **Pete Jarest**'s son, Robert, got to throw out the first pitch at the July 3 Pawsox game. Pete won the opportunity in a contest. Robert, who turned 10 in March, shows excellent form as he launches the ball toward home plate.





# NBC Pipeline

October 2012

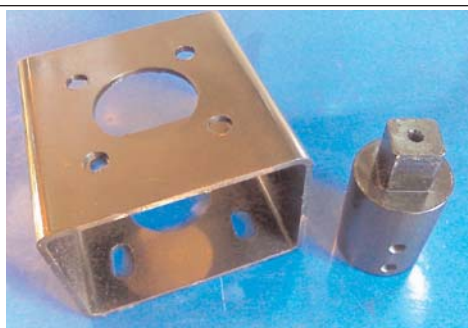
NBC Pipeline is a monthly publication designed to keep Narragansett Bay Commission staff up to date on internal current affairs. Staff is welcome to forward to the Public Affairs Office any items they would like to share or see in a future publication. Your suggestions and participation are encouraged and appreciated.

## Calendar of Events *for October*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8 Columbus Day HOLIDAY	9	10 Eat this, not that! FPWWTF	11	12 Payday	13
14	15	16 Eat this, not that! BPWWTF	17	18	19	20
21	22	23	24 5:00 PM Citizens Advisory Committee Meeting	25	26 Payday	27
28	29	30 11:00 AM Board of Commissioners Meeting	31  HALLOWEEN!			

*All meetings are held at the Commission's One Service Road Offices unless otherwise noted.*

Check out these cool custom elmatic brackets and shafts, made by the mechanics at FPWWTF! Story on p. 3



Well Done, NBC!  
Your 12 blood donations saved 36 lives!



Coming in November: United Healthcare Know Your Numbers Event, November 14, 2012 at the COB - Obtain Blood Pressure, Cholesterol and Body Mass Index Screening at the on-site Health Fair\* and receive a \$100 Wellness Incentive Credit.

*\*Certification of physician consultation is required if screening is completed at physician's office or if results obtained at the on-site Health Fair do not meet the guidelines.*



# News Briefs...

## Spotlight on Stormwater



With cooler weather upon us, the foliage changing colors and leaves beginning to fall, autumn is often an ideal time for people to do major yard cleanups. Yard debris, like shrubbery trimmings, grass clippings and piles of leaves, can be a significant source of stormwater pollution. Organic yard debris is biodegradable and may seem harmless, but excess

yard debris can wash into nearby rivers and streams, bringing fertilizers and pesticides, which pose a threat to water quality. The organic debris brings excess nutrients into the waterways which act as a growth agent for algae. When the algae dies and decomposes, it robs oxygen from the water leading to fish kills and degraded aquatic habitats. The debris can also wash into storm drains, clogging drains and pipes and ultimately lead to flooding.

### Do Your Part:

- Do NOT pile leaves or other yard debris near storm drains or near streams it can wash into.
- DO use leaf collection bags.
- Recycle grass clippings and their nutrients back onto your lawn.
- Compost organic yard waste in an area away from streams, ponds and wetlands.



Remember... whatever goes into the storm drains will eventually make its way into rivers and ultimately Narragansett Bay.

--Submitted by Kimberly Kirwan



## The Legend of Stingy Jack

For centuries people have been making Jack-o-lanterns for Halloween. When we think of Jack-o-lanterns, we think of carved pumpkins with candles lighting them, brightly propped on people's steps and walk ways during October, but the so-called Jack-o-lantern has deep historical roots and was originally made out of a turnip not a pumpkin!

The phrase Jack-o-lantern stems from a myth about an old Irish man named Stingy Jack. Stingy Jack tricked the Devil into promising he wouldn't have to go to hell for his sins. When Jack died he found out he had been barred from heaven, so he journeyed to the gates of hell to demand his due. The Devil kept his promise: Jack did not go to hell. Instead, the Devil doomed Jack to wander the earth for all eternity with only a burning coal to light his way. Jack put the coal in a carved out turnip and has been roaming the earth with it ever since.

The Irish referred to him as "Jack of the lantern" which soon became "Jack-o-lantern." In Ireland and Scotland people began to make their own versions of Jack's Lantern by carving scary faces on turnips, potatoes or beets and placing them in windows and door ways to keep away Stingy Jack and other evil spirits. Immigrants brought this tradition with them to the United States and found that pumpkins, a fruit native to America were perfect for Jack's Lantern.

Check next month's Pipeline to see how creative your fellow NBC staffers get with their pumpkin carving. We're pretty sure Stingy Jack will be impressed!

--Submitted by Talia Girard

For a Stingy Jack inspired recipe, see page 3.

## Welcome!



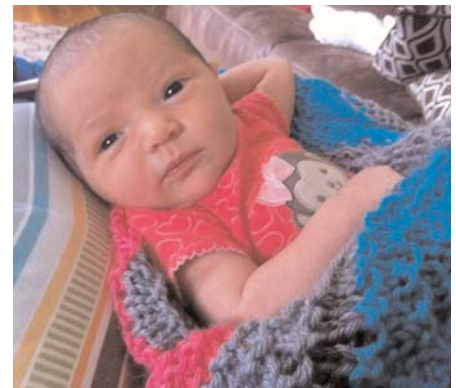
Brian Cunha,  
Environmental  
Compliance  
Technician



Talia Girard,  
Public Affairs  
Specialist

## Congratulations...

To **Abigail Bernier** and husband Adam, on the birth of beautiful baby girl Hadley on September 8! Rich Bernier gets a pat on the back, too, as happy grandfather.



To **Nathan Arruda**, and new wife Morgan, who tied the knot on September 8!

## Beef Up Your Brain



The 3rd floor "brainiacs" have started a lending library! We've set up a bookcase in the lunch room with some featured best sellers in it. It's very sparse at this point, but we hope to expand with the help of staff. It's a bring-a-book, take-a-book system (although you can just borrow a book if you like). If you are in the mood to read a book, come browse the selection! Also, if your shelves at home are full, book donations are enthusiastically accepted!

--Submitted by Lori Vernon

## NBC Hosts Safety Association Technical Meeting

On September 20th, ESTA staff hosted the fall meeting of the Safety Association of RI (SARI) in the COB Board Room. The topic of the quarterly meeting was "Regulatory and Practical Aspects of Confined Space Entry and Rescue," as presented by Peter Rondeau and Glenn Lindsay from Burgess & Associates, Inc. The meeting was well attended by approximately thirty safety professionals from different types of industry.



SARI is organized to bring to its members national viewpoints and local expertise in the fields of safety, occupational health, and environmental management. SARI membership is comprised of members from Rhode Island and nearby Massachusetts and Connecticut, and includes a diverse group of safety, health and environmental professionals who share their insights and experiences with fellow members. The ESTA Program has been an active member of and contributor to SARI since 2009.

October EH&S Training:

Powered Industrial Trucks Classroom Training: 10/2

*---Submitted by David Aucoin*

## Pumpkin Chocolate Chip Cookies

*Even Stingy Jack would love these healthy, seasonal nuggets of yumminess!*

### Ingredients

- 1 1/2 c white whole wheat (or all purpose) flour
- 1 c sugar
- 3/4 t ground cinnamon
- 1/4 t freshly grated nutmeg
- 1 t baking soda
- 3/4 c chilled butter
- 1 egg
- 1 c fresh or canned pumpkin (or butternut or acorn squash) puree
- 1 3/4 c rolled or quick oats
- 1 c chocolate chips or chocolate chunks, preferably semi-sweet



### Instructions

- Preheat oven to 375°F.
- Whisk together the flour, sugar, cinnamon, nutmeg and baking soda in a large mixing bowl. Using a pastry cutter or two butter knives, cut in the butter until it the butter is pe-sized or smaller.
- In a separate bowl, whisk together the pumpkin or squash puree and the egg until smooth. Add that into the dry ingredients along with the oats and chocolate chips until the mixture is evenly combined and there are no dry pockets.
- Scoop onto a parchment or silpat lined baking sheet by rounded tablespoons (or with a cookie scoop/disher.) Bake for 12 minutes or until the cookies are set and lightly browned around the edges. These cookies will not flatten as they bake.

*--Recipe and photo from foodiewithfamily.com*

## Bucklin Point Visitor

Ed Taylor shared this photo of a deer, with ears at full alert, near the Bucklin Point outfall. It has been a busy year for wildlife at Bucklin Point---deer, birds, fox, and other animals are often seen scampering about.



## Building Customized Solutions at Field's Point

At the maintenance shop at Fields Point mechanics are using new machinery to manufacture custom parts for plant equipment. Mechanics Mike Spring, Mike Hollowell, Mike Wolfe, Greg Dacruz and Glenn Peterson used their high-level metal fabricating skills, which results in cost savings for the NBC and our ratepayers.



According to Mike Spring, the brackets and shafts needed replacing on the RAS valves and IFAS tanks. Since each bracket was unique, they were a challenge to replace. The Field's Point crew standardized the brackets and shafts for the RAS valves; since they are now all the same, they will be easier to replace in the future. This project, which included making and installing the parts, took about two weeks.

Mike Spring said they are working on manufacturing more parts when needed for the facility. These mechanics are to be commended for their ingenuity and attention to detail; their innovation results in greater efficiency and cost savings at the WWTF. Great Job!

*--Written by Talia Girard; Thanks to Carmine Goneconte for the tip!*





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November 2012

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				1	2	3
4	5	6  Election Day	7	8 Open Enrollment 11/8-13	9 Payday	10
11	12  Veteran's Day	13	14 Know your numbers event 7AM - 11AM	15	16	17
18	19  World Toilet Day	20	21	22  Thanksgiving Day	23 Payday	24
25	26	27	28	29	30	

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### Great Job, NBC!

Here are the walking results for the first walking session...

The total miles from NBC to Honolulu, Hawaii are **5,078.53**.

The total number of steps currently logged and converted into miles equals **5,237** miles. This means that the employees have already reached Honolulu, Hawaii and are on their way back!



*-- Submitted by Chrystine Marandola*

# News Briefs...

## NBC Team Shows Strong Performance at 2012 Operator's Challenge

Each year, the Narragansett Water Pollution Control Association (NWPCA) hosts The Operators Challenge, bringing together highly talented wastewater operators and maintenance professionals to compete in a contest of precision, speed and safety. With challenges that include collection systems, laboratory, process control, maintenance and safety, operators from throughout the state participate for the chance to represent Rhode Island at the national competition in New Orleans. These events test the diverse skills required to operate and maintain our nation's wastewater treatment facilities, to reclaim contaminated water,



The NBC team: Joe Crosby, Dan Perotta, Mike Spring, and Mike Caesrine.

ensure its safe return to the environment, and protect public health.

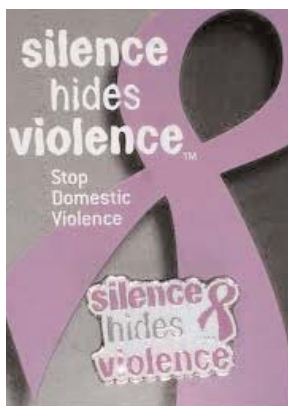
NBC's Maintenance Supervisor Mike Spring and Mechanics Joe Crosby and Mike Caesrine participated for the first time in New England's 2012 Operators Challenge in Smithfield.

Mike, Joe and Mike spent three months training and preparing for the competition. Even with this intense preparation, the NBC team members were the new kids on the block: many of the other New England teams have trained longer and have been together for many years. "Despite our short training time, the NBC team did very well, coming in 2nd and 3rd place for most of the physical work. What hurt us were the penalties, many things that you wouldn't even think of--- like not wearing gloves--- that knocked down points," said Mike Spring. Joe Crosby added, "We consider this experience a lesson learned, now we know what to improve on for the years to come." Joe also noted that the team is looking for two more people from NBC to participate, preferably people with lab or operations experience. The NBC team sends special thanks to Carmine Goneconte, the entire NBC, and the NWPCA for their support and look forward to next year's competition.



At left, top: The entire team, during the pump event, disassembled and reassembled a submersible mixer and a submersible pump. Bottom: Joe Crosby in a confined space rescue. Photos by Mike Spring.

## Take Action Against Domestic Abuse



October was Domestic Abuse Awareness Month. Domestic violence is a pattern of abusive attacks that are physical, sexual and mental against another person to gain power and control in a relationship. These attackers will frighten, terrorize, manipulate, hurt, injure and sometimes kill the other person. The Rhode Island Coalition Against Domestic Violence provides communication, resource sharing, and networking for those in need of help or those who have survived.

The RICADV educates the public and promotes awareness of this often hidden issue by partnering with survivors to strengthen the voices of abused victims. Between 2001 and 2011, over 80 Rhode Islanders died as a result of domestic violence, and children were present for 12 of the incidents either witnessing the homicide, discovering their loved one's body, or being killed themselves.

Domestic violence should not happen to anyone, ever. If you know of an abusive situation, call the RICADV 24-hour helpline at 1-800-494-8100; for additional information visit [www.ricadv.org](http://www.ricadv.org).

## United Healthcare's Know Your Numbers Event

- November 14, 2012 at the COB
- Get Blood Pressure, Cholesterol and Body Mass Index Screening at the on-site Health Fair\* and receive a \$100 Wellness Incentive Credit.



**Register by 7AM on Tuesday November 13th.**

*\*Certification of physician consultation is required if screening is completed at physician's office or if results obtained at the on-site Health Fair do not meet the guidelines.*

## Congratulations!

To the Bucklin Point Team, of T.J. Harrington, Tom Olivo, Bill Badger and Mike Taylor on their victory at the NBC Golf Tournament on September 13th!

To Dave Teixeira, father of the bride to daughter Ashley, who got married on September 22nd to Neil Picard.

## NBC Leads RI WWTFs in Renewable Energy

In 2008 the NBC was awarded a grant of \$275k from the EPA to reduce energy use and improve energy efficiency for WWTF's. In this comprehensive project, entitled Sustainable Energy Management Practices for Waste Water Treatment, the NBC worked with all 19 wastewater treatment plants in Rhode Island to accomplish this goal. NBC's participation was led by Environmental Safety and Technical Assistance Manager Jim McCaughey. RI DEM, URI and National Grid all partnered with the NBC to improve energy efficiency, and early results indicate significant energy reduction. "We are looking at about 4,500,000 kWh per year of potential energy savings", noted Jim McCaughey.

The goal of the project was to improve the energy efficiency of participating WWTF's by a minimum of 5-10%, and by using renewable energy opportunities, to decrease the energy demand from the local power grid by as much as 10-20%. In addition, the NBC instituted an Environmental Results Program with the food processing business sector, to ensure that restaurants properly dispose greases and oils, and encourage the use of the materials as a renewable energy source. This project will also reduce the generation of greenhouse gases while accomplishing the same or better level of wastewater treatment, resulting in cleaner air and water in healthier communities and ecosystems.



## NBC WWTFs Receive Regional and National Excellence Awards

Both the Bucklin Point and Field's Point facilities were recognized by the National Association of Clean Water Agencies with Silver Awards for permit compliance. In addition, Field's Point was named the Most Efficient Large Secondary WWTF in Rhode Island by the Narragansett Water Pollution Control Association. All three awards were recognized at the September 2012 Board of Commissioners meeting. Congratulations to Operations staff for these well-deserved accolades!



*Bucklin Point WWTF NACWA Silver Award: Chairman Vincent Mesolella, David Sousa, Tom Olivo, Ed Midgley, Executive Director Ray Marshall.*



*Field's Point WWTF NACWA Silver Award and NWPCA Award: Chairman Mesolella, John Lombardi, Jack Fasciatelli, Art Sheridan, Ray Marshall.*

## Apple Bread Stuffing Recipe

### Ingredients:

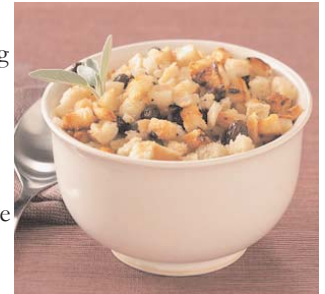
- 1/3 cup finely chopped onion
- 4-1/2 teaspoons butter
- 2 cups soft bread crumbs
- 1 cup chopped peeled tart apple
- 1/3 cup raisins
- 1/4 teaspoon salt
- 1/4 teaspoon sugar
- 1/8 teaspoon rubbed sage
- 4 teaspoons unsweetened apple juice

### Directions:

In a small nonstick skillet coated with cooking spray, cook onion in butter until tender. In a small bowl, combine the bread crumbs, apple, raisins, salt, sugar, sage and onion mixture. Drizzle with apple juice; toss to coat.

Transfer to a 3-cup baking dish coated with cooking spray. Cover and bake at 350° for 30 minutes. Uncover; bake 5-10 minutes longer or until apple is tender and top is lightly browned.

Yield: 4 servings.



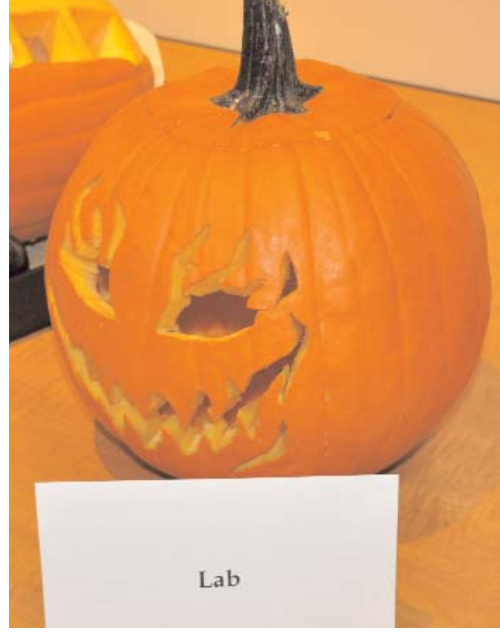
*--Recipe and photo from tasteofhome.com*

# We Carved Up Some Fun!

1st Place  
Customer  
Service



3rd Place  
PP&R



Clockwise from top left: Customer Service, PP&R, IT, IM, EMDA, Lab.






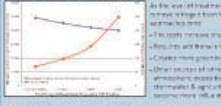

*Clockwise, from top left:  
Accounting, Finance, Field's  
Point, Sherri Arnold and  
her super-cute son,  
Purchasing, Executive, HR,  
Field's Point Maintenance.*



# NBC Proposes Sustainable Solutions for WQ at National Conference

## Achieving Water Quality Standards by Implementing Sustainable Solutions

Thomas Uva, John Motta, James Kelly, Pamela Reitsma, Christine Comeau and Catherine Oliver  
The Narragansett Bay Commission, Providence, RI

	PAST	PRESENT	FUTURE
 <p>The Narragansett Bay Commission is Rhode Island's largest wastewater authority dedicated to providing reliable, cost-effective wastewater collection and treatment services to over 360,000 residents and 7,700 businesses in ten Rhode Island communities in the metropolitan Providence and Blackstone Valley areas.</p>	<p><b>BACK WHEN THINGS WERE "GOOD":</b> Wetlands, eelgrass, and shellfish were abundant, though man had begun to leave its footprint on Narragansett Bay</p> <p>Providence Wastewater Treatment Facility</p> <p>Field's Point WWTFF established in 1983</p> <p>The first electric line station in the USA</p> <p>The largest built in the USA</p> <p>Water of the year in 1981, but no detection was present</p> <p>Upper Providence River and Seekonk River (1910)</p> 	<p><b>PROBLEM:</b> Upper Narragansett Bay experiences dissolved oxygen impairment thought to be partially caused by elevated nitrogen concentrations</p> <p>NBC has identified issues:</p> <ul style="list-style-type: none"> <li>180 mgp conventional plant in the water that increases impact with treatment of NP</li> <li>180 mgp sewerage treatment plant with no nitrification</li> <li>180 mgp sewerage treatment plant with no nitrification</li> </ul> <p>The NBC has increased its nitrogen abatement:</p> <ul style="list-style-type: none"> <li>Reduces both by 50% by 2014</li> <li>Increases the nitrogen load by 25% from the 180 WWTFF</li> <li>Current sewerage by 2014 to increase 100% to 180 mgp</li> <li>Projects an increase of 250% of the average nitrogen load by 2017</li> </ul> <p>NBC four monitoring stations:</p> <ul style="list-style-type: none"> <li>Monitoring stations with increased flow</li> <li>NPDES nitrogen loading remains relatively constant over time</li> </ul> <p>Management Bay's actions:</p> <ul style="list-style-type: none"> <li>Phase 1 completed by roughly 2009 over 100 mgp</li> <li>Investment of 2.7M in NPDES, many of which are infrastructure investments with limited short-term benefits</li> </ul> <p>Upper Providence and Seekonk River (2010)</p>  <p>Since 2000 the upper Providence and Seekonk Rivers have undergone significant changes, some being:</p> <ul style="list-style-type: none"> <li>Construction of wastewater treatment plants</li> <li>Implementation of wetlands, including the Field's Point WWTFF</li> <li>Construction of the new Providence River</li> <li>Construction of the new Providence River</li> <li>Construction of the new Providence River</li> <li>Construction of the new Providence River</li> </ul> <p>These changes have made the river more resilient, such as:</p> <ul style="list-style-type: none"> <li>Creation of riparian habitat</li> <li>Creation of riparian habitat</li> <li>Creation of riparian habitat</li> <li>Creation of riparian habitat</li> <li>Creation of riparian habitat</li> <li>Creation of riparian habitat</li> </ul>	<p><b>NON-SUSTAINABLE SOLUTION:</b> NPDES regulators typically focus on the water column to improve water quality. An example is NPDES permitting of WWTFFs to reduce nitrogen to improve dissolved oxygen</p>  <p>As the flow rate increases in the water column, the dissolved oxygen levels decrease.</p> <ul style="list-style-type: none"> <li>As the flow rate increases, the dissolved oxygen levels decrease.</li> <li>As the flow rate increases, the dissolved oxygen levels decrease.</li> <li>As the flow rate increases, the dissolved oxygen levels decrease.</li> </ul> <p><b>SUSTAINABLE SOLUTION:</b> A holistic ecosystem-based approach utilizing sustainable solutions is employed</p>  <p>Multiple actions must be taken to improve water quality in the water column:</p> <ul style="list-style-type: none"> <li>Reduce nitrogen loading</li> <li>Reduce nitrogen loading</li> <li>Reduce nitrogen loading</li> <li>Reduce nitrogen loading</li> <li>Reduce nitrogen loading</li> <li>Reduce nitrogen loading</li> </ul> <p>Engineering solutions to improve water quality can be achieved with:</p> <ul style="list-style-type: none"> <li>Reduced nitrogen loading</li> <li>Reduced nitrogen loading</li> <li>Reduced nitrogen loading</li> <li>Reduced nitrogen loading</li> <li>Reduced nitrogen loading</li> <li>Reduced nitrogen loading</li> </ul>

*Congratulations to Tom Uva, John Motta, Jim Kelly, Pam Reitsma, Christine Comeau, and Catherine Oliver, whose poster: "Achieving Water Quality Standards by Implementing Sustainable Solutions" was featured at the 2012 Restore America's Estuaries Conference in Tampa, FL! To view all eight feet of the poster up close and personal, visit PPR. The poster makes some compelling propositions for the future of Narragansett Bay.*

### NBC Fares Well in Hurricane Sandy

As New England braced for the onslaught of Hurricane Sandy, NBC crews mobilized to protect NBC structures and equipment and to prepare the sewer system for the coming storm surge. A huge thanks goes out to all NBC staff who worked quickly and efficiently to ensure that NBC assets as well as water quality in the bay was protected. Late in the day on Monday, October 29, Governor Lincoln Chafee stopped by the Field's Point WWTFF with Lt. Governor Elizabeth Roberts for a status check. The Governor was impressed with NBC operations and preparedness and expressed his excitement about the wind turbines on site.



The NBC came out of the storm with no damage to the facilities. The tunnel also performed admirably and the turbines were spinning again on Tuesday.

Great job!

### Speaking of Turbines...

You know they're spinning, right? As of October 24, the Field's Point WWTFF is now (at least partially) powered by wind. YAY!!

### NBC Joins with Laborers to Talk About Clean Water & Jobs



On September 26, the NBC joined with the New England Laborers to talk about the importance of clean water construction in creating sustainable jobs in Providence. Chairman Mesoella was joined by Michael Sabitoni, President of the RI Building and Construction Trades Council and Business Manager of RI Laborers District Council, and Bonnie Nickerson of the City of Providence Planning Department at the former Price Rite parking lot in Olneyville, one of the main sites for CSO Phase II construction. "We're here today on the banks of the Woonasquaket River, declared by Congress as an American Heritage River for its historic role as a social and economic resource," Chairman Mesoella said, "to talk about two very important things: clean water and good jobs."





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						1
2	3 10:00 Wind Turbine Commissioning Ceremony FPWWTF 11:00 Board of Commissioners meeting.	4	5	6	7 Last day to purchase Disney on Ice tickets! Payday	8  Hanukkah begins
9	10	11	12 Employee appreciation event 12-2 COB	13	14	15
16  Hanukkah ends	17	18 Employee appreciation event for IM & FP (7-3, 3- 11 & 11-7)	19 RIBC Blood Drive COB 9am - 1pm	20	21  First day of winter Payday	22
23	24  Christmas Eve	25  Christmas Day Holiday	26	27	28	29
30	31  New Year's Eve					

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# News Briefs...

## Can You Imagine Not Having a Toilet?

One in three people on earth does not have access to a toilet. World Toilet Day, which takes place on November 19th, was created by the United Nations to raise global awareness of the daily struggle for proper sanitation that a staggering 2.6 billion people face. This day is celebrated in over 19 different countries with over 51 events being hosted by various water and sanitation advocates. This day not only brings awareness to lack of proper sanitation but also the emotional and psychological consequences resulting from inadequate sanitation.

Many people in areas without adequate sanitation develop deadly illnesses, which affect quality of life, killing more people than HIV/AIDS, malaria and measles combined, and resulting in 1 death every 20 seconds. Proper sanitation has been established as a human right; many governments are trying to establish a plan of action and take steps to give those affected a toilet. Toilets are symbols of better health, higher income, more education, higher social status and a cleaner living environment.

Did you know?

- o The average person spends three whole years of their life sitting on the toilet.
- o The first toilet cubicle in a row is the least used (and consequently cleanest).
- o The toilet is flushed more times during the super bowl halftime than at any time during the year.
- o One-third of all Americans flush the toilet while they are still sitting on it.
- o The first toilet ever seen on television was on "Leave It to Beaver."



## Welcome!



Michael Bruce, IM Operator II



Lucinda, Bechaz, Capital Accounting Assistant



Amanda Kezirian, Pretreatment Technician

## Butterball Cookie Recipe



### Ingredients:

- 1 cup butter, softened
- 1/2 cup confectioners sugar
- 1/2 teaspoon salt
- 1 teaspoon almond extract
- 2 cups all-purpose flour
- 1 1/2 cups finely chopped walnuts

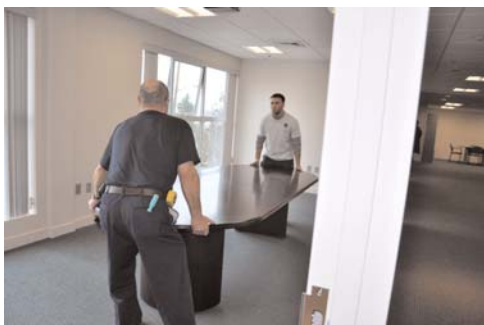
### Directions:

Mix butter or margarine with sugar until creamy. Add salt, almond or vanilla extract, flour, and nuts. Mix WELL. Chill dough until firm enough to handle. Preheat oven to 350 degrees F (180 degrees C). Using fingers, shape dough into 1 inch balls or crescents. Place on ungreased cookie sheet. Bake for 12 to 15 minutes or until light brown. While cookies are still warm, roll in powdered sugar.

-- from allrecipes.com

## The new conference room is finished!

Congratulations to Eddie Viveiros on the great job constructing the new conference room on the second floor. It's a perfect setting for meetings with a nice view of the plant. We appreciate your hard work! Also, a thank you to Anthony Turchetta for helping Eddie take apart the old table, moving it into the new conference room and putting it back together! Great job!



At right, top: The new conference room. Bottom left: Eddie and Anthony putting the table in. Bottom right: Eddie moving the chairs in.

## NBC Completes 15th Clean Audit!

Fiscal Year 2012 marks the NBC's 15th year in a row with a clean audit opinion and no management letter, meaning no findings and no recommendations for improvement.

### Audit FAQ:

Q: What is an audit?

A: An audit is an unbiased examination and evaluation of the financial statements of an organization.

Q: Why must NBC have an annual audit?

A: NBC is required by RI General Law 35-6-37 to have an annual audit; the law states that financial statements are required from state departments, agencies and instrumentalities.

Q: How long does an audit take?

A: An audit is done over a three to four month span, which starts in June and the final audit must be delivered by September 30th.

Q: Who performs the audit?

A: For the past six years NBC has had their audits done by an outside firm, Bacon & Company CPA's LLC.

Q: Now what?

A: After the completion of our audit we submit it to the Government Finance Officers Association (GFOA) where we have the potential to receive an award called the Certificate of Achievement for Excellence in Financial Reporting (CAFR).

"We have received this award 10 years in a row and will soon find out if we've won our 11th award, which we are very hopeful about," noted NBC Controller Leah Foster. This award is the highest form of recognition in the area of governmental accounting and financial reporting and represents significant accomplishments on those who've won. Not only has the NBC had another successful audit, the agency has also finished the fiscal year under budget for the past 21 years and has won the GFOA's Distinguished Budget Presentation Award for the past ten consecutive years.

Congratulations to the staff in A&F for all their hard work and achievement!



## NBC Employees Utilize Online Safety Training

In July of 2011, NBC's "Online University" was officially launched. Initially organized by the ESTA section and



developed in cooperation with Beacon Mutual Insurance and FirstNet Learning, Inc., this new online training resource was developed to heighten the awareness levels of all NBC employees, and to help improve on-the-job safety.

This valuable online training software has been implemented to supplement existing in-house OSHA General Industry (29 CFR 1910) training but is not a replacement for required classroom training. The Online University contains numerous environmental, health and safety courses that can be accessed from any Internet connection during or after work hours, 24/7, through the following link: <http://firstnetcampus.com/beacon2/entities/NBC/login.htm>.

Each employee has a username and password, which can be obtained from his/her section manager. In addition to basic General Industry Health & Safety courses, employees can also access courses on Ergonomics and Driver Safety. Please visit the NBC Online University to see the class offerings and take one of the FREE online classes or refresher trainings, but as always, please be sure to get supervisor approval first.



Recently, NBC's Online University was utilized by many field employees for the annually required Healthy Back/Preventing Slips, Trips & Falls training, which is normally conducted in a classroom setting by an instructor from Beacon Mutual. 44% of all NBC employees required to take this training did so by completing the course online and obtaining certificates through NBC's Online University. This is an impressive trend that hopefully will continue throughout all NBC sections.

Employees may contact NBC's Safety Compliance Coordinator at ext. 418 for more information about NBC's Online University.

Safety Trainings: New Employee Safety Training - 12/4

-- Submitted by David Aucoin

## #1 Providence!

Confirmed by Travel + Leisure Magazine, Providence has the best restaurants and the best food in America! Beating out New York City in the ranking for "America's Favorite Cities" and also up from the number two spot from last year in 2011. This makes the city of Providence an attraction for students, professionals and innovative industries, which boosts the local economy.

Providence earned high rankings in each of the nine sub-categories, including a Number One ranking for burgers. The Capital City also ranked second for ice cream and pizza; third for cafes; fourth for coffee and food trucks; eighth for fine dining and ethnic food; and ninth for microbrews. Congratulations Providence!

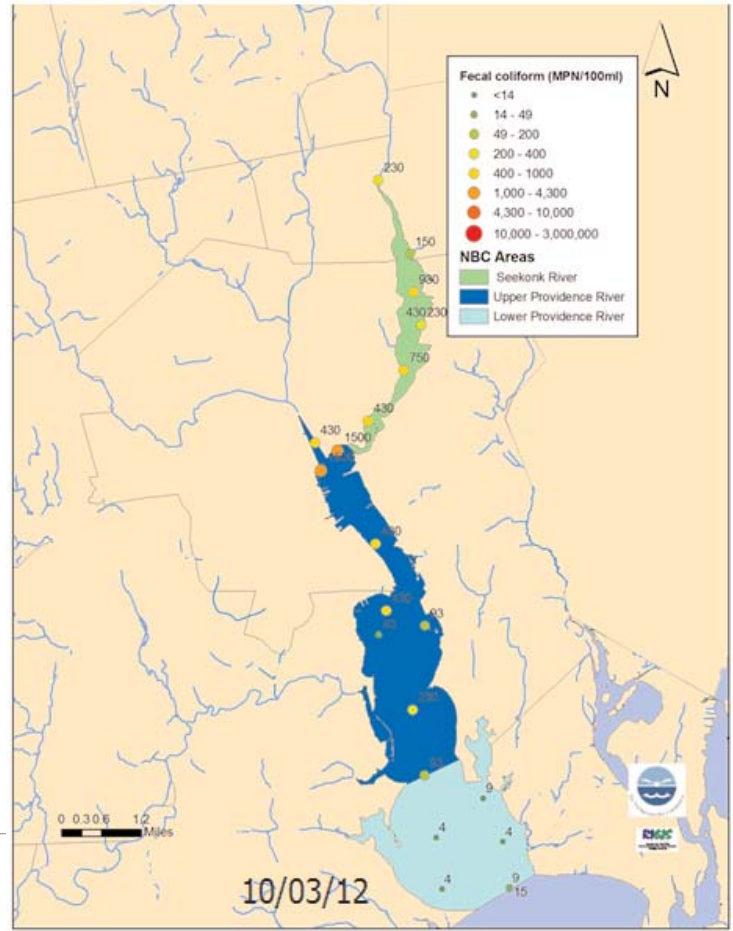


-- from providenceri.com/citynews

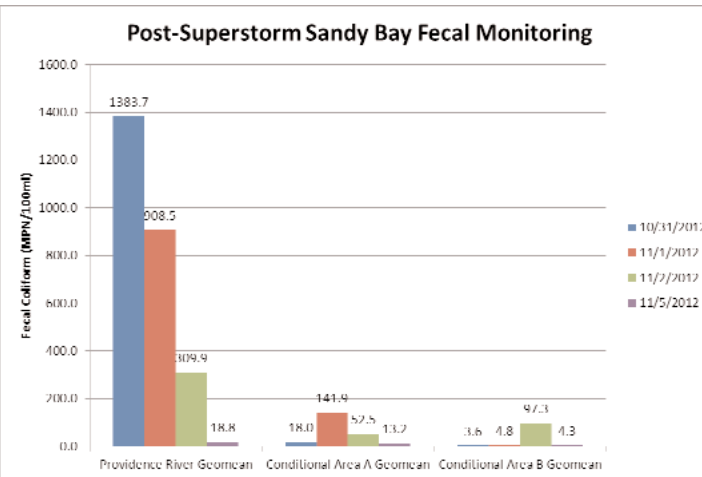
# Bay Responds Well in the Wake of Hurricane Sandy

As Hurricane Sandy tore up the North East, the city of Providence was preparing for the worst, shutting down schools, businesses, banning shellfishing and closing the hurricane barrier in Providence. NBC's Interceptor Maintenance crew had to coordinate with other state agencies on closing the hurricane barrier and shutting down the CSO tunnel that runs underneath Allens Avenue that controls the sewage flow into Providence. The tunnel was closed during the peak hours of the storm on Monday October 29th. The tunnel captured 57.365 million gallons at this time.

NBC's EMDA department began preparations for the storm starting on Friday October 26th. "We secured equipment and removed the boat from the water to prevent damage to the vessel," noted, Jim Kelly. The days following the storm EMDA went to collect samples to test the fecal coliform levels in the Bay and on the 31st they were extremely high in the Providence River area. As days progressed the levels dropped dramatically. In the upper Bay area levels were somewhat high on November 1st and in the lower Bay area levels were higher on November 2nd. This shows a steady decline in fecal coliform which is caused by flushing actions as well as the die off of the bacteria. As of November 5th areas of the Bay met water quality standards of the Department of Environmental Management.



Top, right: map of the bay. bottom, left: chart for the decline in fecal coliform after the hurricane.



## Wind Turbine Commissioning Ceremony

On Monday December 3rd Congressman David Cicilline, Senator Sheldon Whitehouse, Senator Jack Reed, Mayor Angel Taveras and many other elected officials will join the NBC Board of Commissioners to celebrate the conjunction of green energy and clean water at the commissioning event for the NBC's wind turbines.



These three turbines will supply 35-45% of the electrical power demand for the Field's Point Wastewater Treatment Facility. The electricity produced by these turbines will also offset approximately 3,000 tons of carbon dioxide per year that would have been released from fossil fuel generated electricity.

## Walking For Fitness

Congratulations to all those who participated in the walking program! Those who completed the program will receive \$100 wellness credit in their 12/7/2012 paychecks.

Those who completed the program were entered in a raffle. Those winners are..



John Lombardi: NBC logo folding chair.

Rick Mello: \$25 gift card to Whole Foods.

Great job everyone!

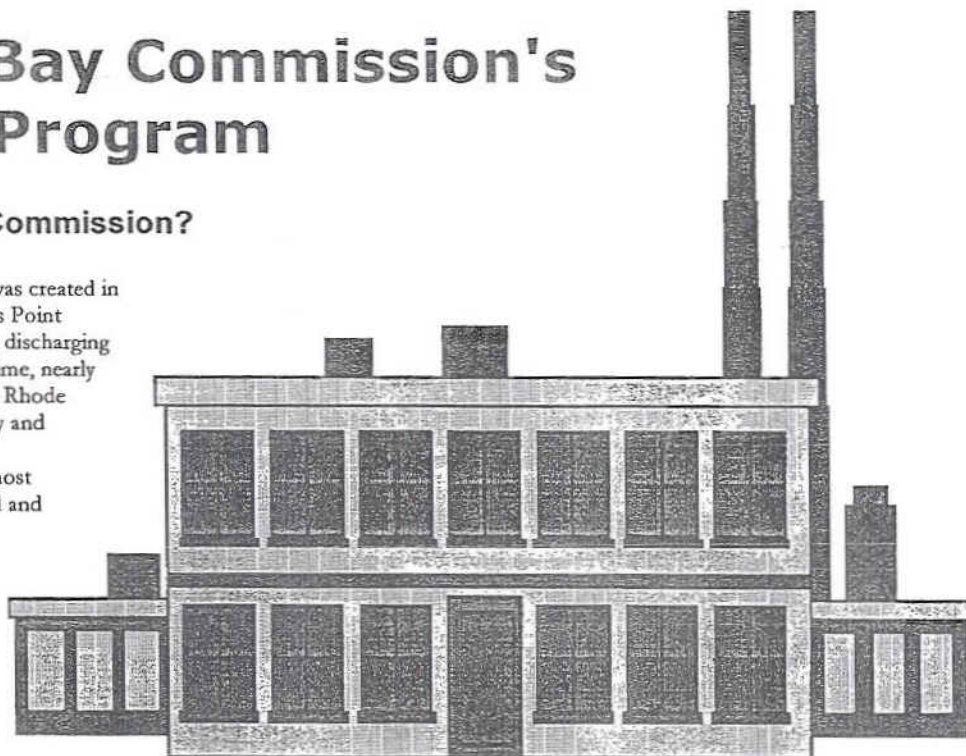
# ***EDUCATIONAL DOCUMENTS***

# Narragansett Bay Commission's Pretreatment Program

## What is the Narragansett Bay Commission?

The Narragansett Bay Commission, or the NBC, was created in 1980 to reduce the amount of pollutants the Field's Point Wastewater Treatment Facility, in Providence, was discharging into Narragansett Bay and its tributaries. At that time, nearly 65 million gallons of untreated sewage flowed into Rhode Island's waterways everyday, resulting in temporary and permanent closures of shellfishing beds in Upper Narragansett Bay, violations of federal laws, and most importantly, threatened the region's environmental and economic well-being. The NBC acquired the facility from the City of Providence in 1982, and has spent the last decade transforming the once failing, antiquated facility into the highly sophisticated, award winning facility it is today.

In 1992, the NBC assumed ownership of the Bucklin Point Wastewater Treatment Facility in East Providence. The NBC now owns and operates the state's two largest wastewater treatment facilities and provides quality wastewater collection and treatment services to about 300,000 persons and 8,000 commercial and industrial customers in Providence, North Providence, Johnston, Pawtucket, Central Falls, Cumberland, Lincoln, the northern portion of East Providence and small sections of Cranston and Smithfield.



## What is the purpose of a Pretreatment Program?

Since wastewater treatment facilities are not designed to remove heavy metals, cyanide and other toxic chemicals, the federal Environmental Protection Agency (EPA) requires that wastewater agencies implement Pretreatment Programs to control toxic discharges. The NBC's Pretreatment Program staff is responsible for protecting its treatment facilities and Narragansett Bay from the discharge of such contaminants. To satisfy EPA requirements, a program was put in place by the NBC to monitor and regulate the many electroplaters, metal finishers, chemical manufacturers, machine shops, laboratories, hospitals, laundromats, restaurants, and other firms that are tied into the NBC's sewer system.

Depending upon what kind of business or industry is discharging into the system, certain substances can do a lot of damage to the sewer system, the wastewater treatment facility, the environment and, ultimately, to people. The discharge of metals and other toxics into the sewer system jeopardizes the health and safety of NBC personnel, clogs sewer lines, can be extremely toxic, if dumped in high concentrations, and can mix with other chemicals to form toxic gases in the sewer system.

Heavy metals and other toxics interfere with the operation of the wastewater treatment process by upsetting the biological process at the facilities and killing the microorganisms needed for proper treatment. This prevents the NBC from meeting its effluent limits that are established by EPA and RI DEM. Approximately 40 to 60 percent of the heavy metals and toxics in wastewater can settle out in the sludge, contaminating the sludge, and preventing its reuse, while the remainder of the toxics empty into Narragansett Bay and its tributaries. Once this happens, marine life is exposed to toxic substances, which may enter the food chain and eventually expose people to these toxic substances. While our mission at the NBC is to protect the environment, our top priority is to protect human health. Our pretreatment program helps us accomplish this goal.

## How effective is the Pretreatment Program?

To date, this program has had a major positive impact on the quality of treatment and discharges from the Field's Point and Bucklin Point facilities. By taking steps to permit, monitor and regulate the thousands of sewer users in the NBC District, the NBC has dramatically reduced the amount of metals and toxics being dumped into the sewer system and ultimately into Narragansett Bay. For example, in 1981, local industries discharged 954,099 pounds of heavy metals and 80,440 pounds of cyanide to the Field's Point Wastewater Treatment Facility. Data for 2006 indicates that significant reductions in metals (96.6%) and cyanide (96.7%) were achieved. Additionally, nearly 95.6% of all our regulated users are adhering to these environmental regulations.

## **Why do I have to pay sewer user fees and permit fees?**

Sewer user fees are necessary for the NBC to recover the cost to transport and treat wastewater discharged from commercial, industrial, and residential users. The user fees are based, in part, on the amount of water discharged to the sewer system and are regulated by the Public Utilities Commission (PUC). Part of the fee charged to users is a fixed amount, the other part is based on how much water is used. By conserving water, a sewer user can reduce the portion of the fee associated with the amount of water used.

In May, 1990, the PUC issued an order requiring that the expense of the NBC's Pretreatment Program must be paid for entirely by the permitted user. These permit fees are necessary to recover costs associated with satisfying all EPA and State mandates and to ensure the protection of the treatment facilities and Narragansett Bay. The rates charged are PUC approved and cover the cost of program administration, facility inspection and facility sampling conducted by the NBC.

## **How were permit fees determined?**

Discharge permit fees range from \$217 - \$14,492 per year. Individual rates are based on the effort necessary for the NBC to regulate a user. The level of effort is dependent on the size of a facility, the volume of discharge, the toxicity of the chemicals used, etc. Budget plans are available for any business demonstrating financial hardship. Simply contact the NBC Customer Service Section at 461-8828 to discuss a budget payment plan.

## **What if I don't get a permit?**

Failure to apply for a wastewater discharge permit may subject you to administrative, civil and/or criminal penalties of up to \$25,000 per violation per day and you may lose your privilege to discharge into the NBC sewer system. The NBC is strict about the enforcement of this requirement because we need to know what is going into the sewers so we can protect our treatment facilities and the bay. Further, inconsistent permitting would be unfair to other permitted users and ultimately increase the cost to all other users.

## **What if I need technical assistance?**

The NBC has available free, non-regulatory technical assistance through its Environmental, Safety & Technical Assistance (ESTA) Section, formerly known as Pollution Prevention. Pollution prevention is any practice that reduces or eliminates the amount of hazardous materials entering a waste system. Elimination of pollution at the source will not only help you remain in compliance with discharge standards, but will save you money by taking full advantage of all your resources. Pollution Prevention engineers and chemists are available to assist you incorporate the latest source reduction technologies into your manufacturing operations. We will evaluate your operating procedures and general practices and recommend alternatives, such as chemical substitution, that will generate less waste without sacrificing quality production. This program is confidential; no regulatory repercussions will occur by taking advantage of this program. If you wish to have NBC's ESTA staff visit your facility, or if you wish to find out more about this program, please contact James McCaughey, P.E., Environmental, Safety & Technical Assistance Manager, at 461-8848 ext. 352. This program is meant to be one alternative or a step a business can take to meet pretreatment requirements. It may be necessary for a business to seek additional professional guidance from an outside consultant.

## **What if I have more questions?**

Ask us. The NBC has well-trained and capable chemical engineers, technicians and others who would be happy to answer any questions or concerns you may have regarding your permit, or any other program relating to the NBC. For questions regarding the Pretreatment Program, please contact Kerry M. Britt, Pretreatment Manager at 461-8848 ext. 490. For other questions, contact our Public Affairs Office at 461-8848/TDD 461-6540 or email at [jsamons@narrabay.com](mailto:jsamons@narrabay.com).

# NARRAGANSETT BAY COMMISSION



## ENVIRONMENTAL

# BEST

## MANAGEMENT PRACTICES

*for*

## the Management of Waste Dental Amalgam

The Narragansett Bay Commission (NBC) has developed the following set of Environmental Best Management Practices (BMPs) for the Management of Waste Dental Amalgam to help the dental community safely and economically reduce the amount of mercury released into the environment. Dental facilities serviced by the NBC have two procedural options available to them regarding the proper management and compliant discharge of dental process wastewater to the NBC sewer system.

Dental facilities choosing Option 1 must install, use and maintain an amalgam separator with a separation efficiency of 99% when tested according to ISO 11143 standards and must demonstrate compliance with the "Mandatory" portion of the enclosed BMPs. Dental facilities choosing Option 1 will be excluded from conducting costly end-of-pipe wastewater sampling monitoring requirements.

Dental offices utilizing Option 2 are not required to install an amalgam separator but will be required to implement all other applicable Mandatory BMPs, and will be required to monitor and sample their process wastewater discharges on a regular basis in order to demonstrate continuous compliance with all applicable NBC discharge limits.

The NBC strongly encourages the use of ISO 11143 certified amalgam separators (Option 1). These separators help to remove most mercury from dental wastewater without being overly burdensome to operate or maintain. Based on NBC's current discharge limit for mercury, as little as 1/10,000 of a gram of amalgam in one gallon of wastewater would place your office in non-compliance resulting in additional sampling and monitoring costs. Continued non-compliance with NBC discharge limits can result in having your name published in the newspaper as being in significant non-compliance and/or the issuance of fines and penalties.

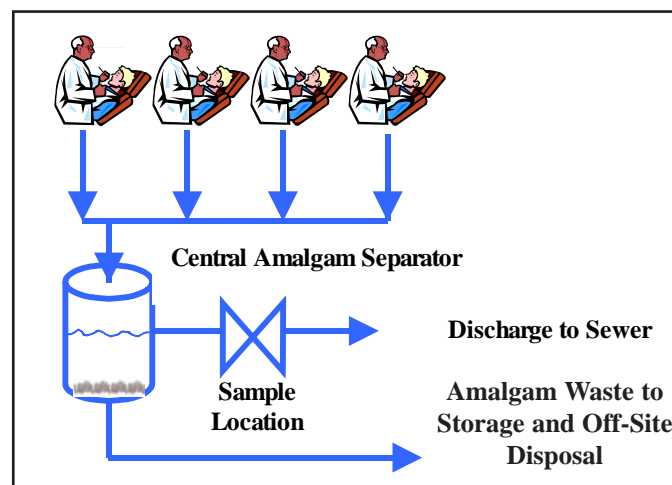




## OPTION 1

### NBC BMP Implementation with the Installation of an Amalgam Separator

Option 1 is the preferred approach and requires the installation and operation of an amalgam separator and implementation of the attached NBC BMPs. Through Option 1, all amalgam-contaminated wastewater, including wastewaters from cuspidors and vacuum systems, must flow through an amalgam separator and through a sample location prior to sewer discharge.



*Typical wastewater plumbing diagram for dental office with an amalgam separator*

### Specific Requirements for NBC Dental BMP Option

#### Installation of Amalgam Separator

Amalgam Separators must be ISO 11143 certified and capable of handling flow from vacuum pumps and chair side cuspidors. Separators vary in complexity, capabilities and cost. Here are some criteria that should be considered when selecting an amalgam separator:

1. The vendor of the equipment must be able to provide ISO 11143 documentation certifying that the equipment has been proven capable of removing at least 99% of amalgam during certification tests.
2. There should be minimal loss of suction power within the vacuum system.
3. A system that is low maintenance is preferred over one that requires manual operation and frequent cleaning and/or servicing.
4. The unit should operate quietly.
5. The unit should be centrally installed so as to service a whole office or a series of chairs in order to minimize the cost and maintenance associated with individual units that service only one chair.
6. The unit or units must be capable of handling flow from:
  - a. Vacuum Systems,
  - b. Cuspidors and
  - c. Sinks if applicable.
7. Plans of the dental office and amalgam separator must be approved by NBC prior to installation

#### Maintenance of Amalgam Separator

1. Amalgam separators must be installed and maintained such that all flow from vacuum systems; cuspidors and applicable sinks receive proper treatment.
2. Amalgam separators must be operational at all times.
3. Follow the manufacturer's specification for maintenance of the separator.
4. Inspect the separator weekly to ensure proper operation.

#### Certification and Record Keeping

1. The dental office must document all separator and trap inspections, cleaning and maintenance activities in a bound logbook.
2. Information in the logbooks must include:
  - Date (mm/dd/yy) of each trap/separator inspection/service activity;
  - A clear indication of which trap/separator is being serviced;
  - All routine and non-routine activities conducted (i.e., cleaning, maintenance, repairs, etc.);
  - Signature of person conducting activity.

#### Best Management Practices

Dental offices choosing this Option must adhere to all of the required BMPs detailed in this brochure.

*1. While regular sampling of wastewater effluent, on the part of the dental facility, is not required as part of Option 1 of the NBC BMP Program, installation of a sampling location is required.*

## OPTION 2

### NBC BMP Implementation without Separation Equipment

(Routine Wastewater Sampling and Compliance Required)

Under Option 2, Dental Offices must implement all applicable NBC Dental BMPs, and regularly sample and analyze the wastewater to demonstrate compliance for silver and mercury. All amalgam waste must flow through a central sample location or multiple sample locations if necessary. If the monitoring results show the dental office to be out of compliance with the discharge limitations, additional pretreatment may be required to attain compliance. The office may elect to modify operations and install separation equipment and participate in Option 1 of this BMP.

### Specific BMP Requirements for NBC Dental BMP Option 2

#### Installation of Sampling Location

Dental facilities choosing this option must collect and analyze samples of their wastewater discharges in order to demonstrate compliance with NBC discharge limits. This will require the separation of sanitary flow from dental process wastewater and the installation of a wastewater sample collection valve.

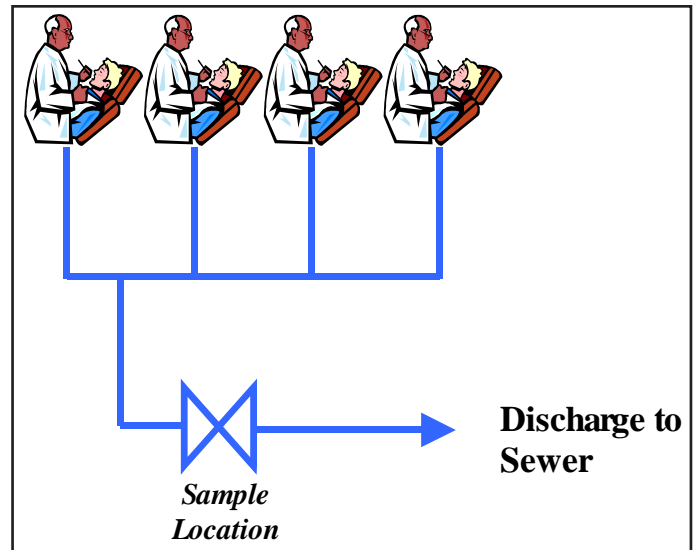
The wastewater sample collection valve must be configured and installed in such a manner that a representative sample of all and any amalgam containing wastewater can be collected at any time during normal operating hours. This will require the installation of a single central sampling location for all flow from vacuum systems and cuspidors or sampling locations for individual wastewater streams. Please note that separate sampling locations will increase sampling and analysis costs.

#### Sampling and Monitoring

Samples must be properly collected and preserved and sent to an approved laboratory for mercury and silver analysis on a quarterly basis. The analytical results must be submitted to NBC within the specified time frame along with a completed Self Monitoring Compliance Report.

#### Effluent Discharge Compliance

The dental facility must maintain compliance with NBC's discharge limits for mercury and silver. Facilities found to be in non-compliance must immediately notify NBC and initiate and continue to conduct weekly sampling of their wastewater discharges until compliance is established for four consecutive weeks. Facilities found to be in Significant Non-Compliance may have their names published in a local newspaper at the end of the calendar year. Continued non-compliance may result in the issuance of fines.



#### Typical Effluent Wastewater Sampling



1. Approved sample valve



2. Always flush valve briefly and safely before sampling



3. Sample collection in progress

# Mandatory Best Management Practices

## Chair Side Traps

1. Equip all dental chairs with chair side traps to capture large amalgam particles from cuspidors and vacuum systems.
2. Use traps with the smallest screen size that your vendor says will work.
3. While not required as a condition for participation in this program, disposable chair side traps are preferred to reusable traps due to the difficulty of cleaning traps for reuse without releasing captured amalgam particles to the sewer system during the cleaning process.

## Maintenance of Chair Side Traps

1. Check to make sure all chair-side traps are in place when chair is in use.
2. Inspect chair-side traps on a daily basis and clean or replace as necessary.
3. If using disposable chair side traps, place spent traps directly into a labeled amalgam waste storage container. Never rinse a used trap over a sink that is directly connected to the sewer or place in trash.
4. If using a reusable trap remove all visible amalgam particles from the trap by emptying the contents into a labeled storage container.
5. Never dispose of the collected amalgam down the drain, in the trash or with sharps and/or biohazard waste.
6. Rinse reusable traps only if necessary and only in sinks plumbed into an amalgam separator using a minimum amount of water.

## Maintenance of Vacuum Pump Filters

1. Check to make sure your vacuum pumps are equipped with filters. Talk to your equipment vendor to upgrade all such equipment not equipped with filters.
2. Talk to your equipment vendor to make sure you are using the smallest available vacuum filter screen that will not compromise the efficiency of the vacuum system.
3. Dry-turbine vacuums - Check to make sure the air/water separator is free of built-up sludge. Manage collected sludge as you would a mercury containing waste - do not wash down drain.
4. Change vacuum pump filters at least once per month or more frequently in accordance with the manufacturer's recommendations.
5. After removing the filter hold it over a spill tray or other type of container that can catch any water that has collected in the trap. Carefully decant the water without losing any visible amalgam. The decanted water, if it contains no visible amalgam, may be discharged to the sewer through an amalgam separator.
6. Place spent filters in their original container or in another sealed container and properly store prior to disposal/recycling as a mercury-containing waste.

## Storage, Management and Disposal of Scrap Amalgam

1. Collect and store all contact and non-contact amalgam in separate appropriate labeled and closed containers.
2. Label all containers used to store waste amalgam with the words "Hazardous Waste" and "Waste Mercury/Amalgam."
3. Wastes containing mercury are regulated as hazardous waste by the RIDEM and EPA - comply with all state and federal hazardous waste management regulations (see section on Hazardous Waste Management).
4. Do not mix waste streams, including contact and non-contact amalgam waste, without checking with your waste hauler and disposal/recycling facility first. Mixing of waste streams may limit disposal and/or recycling options and increase waste management costs.
5. Do not put mercury-containing waste in medical waste containers. Disposal methods used for medical waste, such as incineration, will release mercury into the environment.

Please note: "empty" prepackaged amalgam capsules may contain enough residual amalgam to be classified as a hazardous waste. While not a Mandatory BMP, it is recommended that empty capsules be collected and stored separate from other amalgam waste. This will allow for testing of the spent capsules in order to determine an ultimate disposal method.

## Line Cleaners

Dental clinics may regularly use a liquid cleaner to disinfect the pipes in their vacuum system. Certain brands of line cleaners that are corrosive or oxidizers must be avoided because they dissolve solid mercury. Never use bleach (sodium hypochlorite) or a bleach-containing product to clean vacuum lines, instruments or equipment that may be contaminated with mercury or amalgam. Mercury that is mobilized in this way is very difficult to trap and can easily travel to the sewer plant or into the receiving waters. The following brands of cleaners and disinfectants are acceptable:

- Green and Clean (Metasys)
- GC Spray-Cide (GC America)
- Sani-Treet Plus (Enzyme Industries, Inc.)
- VacuCleanse Evacuation (Infection Control Tech)

The above list is not all-inclusive and NBC may give written approval to use other cleaners. The NBC will review requests to use other cleaners upon receipt of a Material Safety Data Sheet (MSDS) for the proposed cleaner.

# Mandatory Best Management Practices

## Clean Plumbing and Sink Traps

Due to the potential past use of sinks as disposal outlets for contact and non-contact scrap amalgam, all sink traps in the vicinity of mercury use (past or present) must be removed, inspected and cleaned.

1. Remove sink traps/elbows and inspect for sludge build-up.
2. Collect any sludge in a container separate from scrap amalgam waste.
3. Install new traps/elbows or replace the existing traps/elbows after cleaning with an appropriate line cleaner.
4. Dispose of the sludge as a mercury containing waste or have samples of each waste stream tested by a licensed analytical laboratory prior to ultimate disposal. Guidance on testing waste samples can be obtained through NBC's Pollution Prevention Program.



## Sinks Located in Operatories

Sinks located in operatories have the potential to discharge amalgam waste to the sewer from the cleaning and rinsing of dental instruments, chair side traps and other equipment or devices that may come into contact with amalgam. Two Sink Use Alternatives are available to dental offices participating in these Best Management Practices.

**Sink Use Alternative A:** Designate all sinks for "Sanitary Use Only" by eliminating the cleaning of amalgam contaminated instruments, traps and other equipment in all sinks. This is the simplest and least expensive of the two options.

**For sinks designated for "Sanitary Use Only" the following conditions and procedures will apply:**

1. Washing of instruments, filters from chair-side traps and used amalgam capsules will be strictly prohibited.
2. Sign stating: "Sinks to Be Used for Sanitary Purposes Only - No Chemical or Amalgam Disposal" must be clearly posted at each sink.
3. All employees must be trained on this policy and certification of training maintained on site.

**Sink Use Alternative B:** Designate certain sinks for "Sanitary Use Only" and other sinks for "Equipment Cleaning Only." This alternative requires sinks in which equipment cleaning will take place be plumbed into an amalgam separator - if you choose to not install an amalgam separator you will have to comply with Alternative A. If you choose to install an amalgam separator, please note that some separators may not allow for the connection of sinks. Discuss this with your separator equipment vendor before purchasing a separator.

**For sinks designated for "Sanitary Use Only" all conditions and procedures noted above will apply.**

**For sinks used for "Equipment Cleaning Only" the following conditions and procedures will apply:**

1. Plumb each of these sinks into to the amalgam separator.
2. Install flow restricting orifices in each sink discharge line in order to limit and control the flow rate to the separator and prevent washout of the amalgam separator
3. Submit plans of each of these sinks and the amalgam separator to NBC for approval prior to installation.
4. Manage all debris removed from these sinks and drain lines as mercury contaminated waste.
5. Post signs stating: "Washing of Instruments and Filters Contaminated with Amalgam only - Sanitary Use Prohibited" at each sink.
6. Train all employees on these policies and procedures and maintain certification of training on site.

Please note: if flow can not be adequately controlled using flow restrictors a surge tank capable of handling peak flow from these sinks may need to be installed up stream of the amalgam separator.

# Wastewater Discharge Permit Requirements

## Annual Certification and Record Keeping

1. Document all separator (if applicable) and trap inspections, cleaning and maintenance activities in a bound logbook.
2. Include the following information in the logbooks:
  - a. Date (mm/dd/yy) of each trap/separator inspection/service activity,
  - b. A clear indication of which trap/separator is being serviced,
  - c. All routine and non-routine activities conducted (i.e. cleaning, maintenance, etc.)
  - d. Signature of person conducting activity.
3. Maintain all Hazardous Waste Manifest documents and/or shipping papers of mercury waste sent off-site for disposal or recycling on-site and have them immediately available for inspection by NBC.
4. Submit an annual certification statement to NBC attesting to compliance with all Mandatory BMPs and any specific BMPs required by the chosen option.

## Personnel Training Requirements

All personnel associated with the handling and management of amalgam and/or mercury containing materials/ wastes must be trained with respect to:

- the hazards associated with mercury
- hazardous waste management regulations
- procedures to follow in the event of a spill or an accident including spill-reporting requirements.

## Waste Management and Spill Response

If any elemental mercury is used or is present in the dental office, including mercury from historical use and mercury in any medical instruments such as thermometers, a mercury spill kit must be maintained on site and all appropriate staff trained in its use.

Please note: even very small amounts of metallic mercury (for example, a few drops) can raise air concentrations of mercury to levels that may be harmful to human health. The longer people breathe the contaminated air, the greater the risk to their health. Metallic mercury and its vapors are extremely difficult to remove from clothes, furniture, carpets, floors, walls, and other such items. If these items are not properly cleaned, the mercury can remain for months or years, and continue to be a source of exposure.

### *Steps to take in case of a spill:*

- Contact your local poison control center, fire department, the RIDEM or the RIDOH for advice on cleanup the spill.
- Ask everyone to leave the area.
- Close -off the area while unoccupied.
- Shut off conditioning and air circulation to the room
- Open windows and doors in the area of the spill to ventilate the area while clean-up activities are taking place.
- Wear rubber or latex gloves to prevent skin contact with metallic mercury.
- Use a dry sponge, paper towel or paper to clean up the spill.
- Place all collected mercury in a sealed glass jar.
- In the event of a large mercury spill (more than a broken thermometer's worth), immediately evacuate everyone from the area, seal off the area as well as possible, and call local and state authorities for assistance.

### *What Not to do when there is a spill:*

- Do NOT use a vacuum cleaner to clean up a mercury spill. A vacuum cleaner will spread the mercury vapors throughout the area, thereby increasing the chance of exposure.
- Do NOT attempt to sweep the spill with a broom.
- Never dispose of mercury down the drain.
- Never throw materials used to clean up a spill in the trash - contact the RIDEM for guidance.

### **Dental Amalgam Information on the World Wide Web**

**ADA Best Management Practices for Amalgam Waste:**  
[www.ada.org/prof/resources/topics/topics\\_amalgamwaste.pdf](http://www.ada.org/prof/resources/topics/topics_amalgamwaste.pdf)

**Dental Amalgam Recycling Facilities - Northeast Region:**  
[www.des.state.nh.us/nhppp/amalgam\\_recycling\\_facilities.htm](http://www.des.state.nh.us/nhppp/amalgam_recycling_facilities.htm)

**Great Lakes Pollution Prevention Roundtable:**  
[www.glrppr.org/contacts/gltopichub.cfm?sectorid=131](http://www.glrppr.org/contacts/gltopichub.cfm?sectorid=131)

**Mercury Spill Kit Comparative Information:**  
[www.brooks.af.mil/dis/DIS60/sec6b.htm](http://www.brooks.af.mil/dis/DIS60/sec6b.htm)

**Naval Institute for Dental and Biomedical Research:**  
[www.dentalmercury.com/home.cfm](http://www.dentalmercury.com/home.cfm)

**NEWMOA Dental Mercury Topic Hub:**  
[www.newmoa.org/prevention/topichub/toc.cfm?hub=103&subsec=7&na=7](http://www.newmoa.org/prevention/topichub/toc.cfm?hub=103&subsec=7&na=7)

**Waste Reduction Resource Center's Dental Hub:**  
<http://wrrc.p2pays.org/industry/dental.htm>

### Pollution Prevention

The goal of pollution prevention is to reduce or eliminate the use of toxic substances at the source. This minimizes the release of toxic compounds and serves to protect human health by ultimately reducing exposure to solid, dissolved or gaseous toxic compounds. Although source reduction is most efficient, it is often combined with control-based approaches such as end-of-pipe treatment to achieve desired results. Pollution Prevention activities and recycling in dental offices are essential in order to minimize releases of polluting substances into the sewer system, medical waste, ordinary trash or environment. Recommended activities include the use of the following materials, processes or practices:

1. Use non-amalgam substitutes where appropriate as determined by general dental practice procedures.
2. Utilize prepackaged, single-use amalgam capsules to eliminate larger bulk quantities of elemental mercury (also referred to as free, bulk, or raw mercury).
3. Stock amalgam materials in a range of capsule sizes. Use the smallest capsule required for the job at hand to minimize the amount of scrap non-contact amalgam produced.
4. Properly seal all amalgam capsules before amalgamation. Reassemble capsules immediately after dispensing amalgam. Disassemble and clean the amalgamator on a regular basis.
5. If a small amount of elemental mercury is to be disposed of, initiate a reaction with amalgam alloy to form scrap amalgam, which can then be recycled through your amalgam recycler.
6. When removing an existing amalgam, attempt to remove it in chunks so that it is more likely to be caught in the chair-side trap.
7. Consider using techniques that eliminate the need for cuspidors in the operatory when possible.
8. Do not mix different types of wastes, such as contact and non-contact amalgam, when it impacts wastewater treatment or waste disposal. Whenever possible, collect waste amalgam solids for proper storage before they mix with wastewater.
9. Do not discharge solutions that mobilize mercury such as certain vacuum line cleaners that are corrosive or contain bleach or other oxidizing compounds. Neutral, enzymatic cleaners are preferred.
10. During office renovations, alert renovators to the possibility of historical mercury spills that may have resulted in the presence of mercury in carpets, floor cracks, behind moldings and other areas where amalgam capsules may have been spilled. A waste is considered hazardous if TCLP tests indicate a mercury concentration over 0.2 mg/l. Seamless and impermeable floors are easiest to keep clean.

### Hazardous Waste Management

Mercury is one of eight "heavy metals" regulated by EPA and the Rhode Island Department of Environmental Management (RIDEM) as a "Characteristically Toxic" Hazardous Waste.

This means wastes containing mercury, over established Regulatory Levels (0.2 mg/l for mercury using the Toxicity Characteristic Leaching Procedure), must be handled in strict compliance with federal and state hazardous waste regulatory requirements. A detailed overview of these regulations is outside the scope of this BMP document and the reader is referred to the document "Hazardous Waste Compliance Workbook for Rhode Island Generators" at <http://www.state.ri.us> for a comprehensive description of Rhode Island's hazardous waste management regulations. The following general guidelines, however, should be followed as part of generating and managing wastes containing amalgam:

#### Waste Generation

1. Apply for an EPA Identification Number through the RIDEM,
2. Inform all employees of the hazards associated with handling waste amalgam, and
3. Write a brief procedure to be followed in case of a spill of waste amalgam and familiarize all applicable employees with these procedures.

#### Waste Storage

1. Keep all containers closed except when adding or removing waste amalgam,
2. Label containers with the words "Waste Mercury Amalgam",
3. Inspect containers on a weekly basis, and
4. Store containers in a safe and secure location away from office traffic.

#### Waste Shipment

1. Become familiar with hazardous waste manifesting requirements,
2. Utilize only properly licensed/permitted waste haulers, and
3. Utilize only properly licensed/permitted waste recycling/disposal firms.
4. Contact the state environmental regulatory agency from which a waste hauler, recycler and/or disposal company resides in order to assure they are in compliance with all applicable regulations. A list of contacts for all state environmental agencies can be found at [www.epa.gov](http://www.epa.gov).

#### Record-keeping

1. Maintain a readily accessible file on employee training with respect to hazardous waste management, and
2. Maintain a readily assessable file with all copies of Hazardous Waste Manifests.

*Note: EPA regulations allow for certain exemptions from strict hazardous waste management regulations when a waste is being sent off-site for recycling. These exemptions, however, are not always adopted by individual state environmental agencies and are often open to interpretation. It is a good idea to comply with all hazardous waste management regulatory requirements even if the waste is being recycled.*



NARRAGANSETT BAY COMMISSION

**BEST** MANAGEMENT  
PRACTICES

### Emergency Contacts

Rhode Island Department of  
Environmental Management: 401/222-6822

Narragansett Bay Commission: 401/461-8848

Rhode Island Poison Control Center: 401/444-5727

National Response Center: 800/424-8802

Rhode Island Emergency  
Management Agency: 401/946-9996

Local Hospital: \_\_\_\_\_

Fire Department: \_\_\_\_\_

### Useful Web Sites

[www.narrabay.com](http://www.narrabay.com)  
[www.epa.gov/mercury/index.html](http://www.epa.gov/mercury/index.html)  
[www.state.ri.us/dem](http://www.state.ri.us/dem)  
[www.newmoa.org](http://www.newmoa.org)

# Narragansett Bay Commission's Restaurant & Food Preparation Facility Grease Removal Program

## *What is the Narragansett Bay Commission?*

The NBC owns and operates the State's two largest wastewater treatment facilities and provides quality wastewater collection and treatment services to about 300,000 persons and 8,000 commercial and industrial customers in Providence, North Providence, Johnston, Pawtucket, Central Falls, Cumberland, Lincoln, the northern portion of East Providence and small sections of Cranston and Smithfield.

## *What is the purpose of a Pretreatment Program?*

Since wastewater treatment facilities are not designed to remove heavy metals, toxic chemicals, grease, etc., the federal Environmental Protection Agency (EPA) requires that wastewater agencies implement Pretreatment Programs to control toxic discharges. The NBC's Pretreatment Program staff is responsible for protecting its treatment facilities and Narragansett Bay from the discharge of such contaminants. To satisfy EPA requirements, the Pretreatment Program was put in place by the NBC to monitor and regulate the many electroplaters, metal finishers, chemical manufacturers, laboratories, hospitals, laundromats, restaurants and other firms that are tied into the NBC's sewer system.

## *What is a Grease Removal Program?*

The Grease Removal Program was initiated by the NBC's Pretreatment Section to control the discharge of grease and animal fats from restaurants and food preparation facilities into the sewer system.

## *Why is the discharge of grease and animal fats a problem?*

The presence of grease, fats, and oils in wastewater results in major operational problems both in the NBC sewers and at the wastewater treatment facilities. Grease from food preparation operations solidifies on the inside of sewers restricting the flow of sewage, similar to the way that cholesterol restricts the flow of blood through arteries and veins. Sewer blockages have resulted from this grease build up, causing raw sewage to back up into the basements of homes and businesses. Further, grease has fouled equipment and controls at treatment facilities, and high concentrations of grease and oils in wastewater inhibits the biological processes used to treat domestic sewage.

## *What kitchen operations are responsible for grease entering the sewer system?*

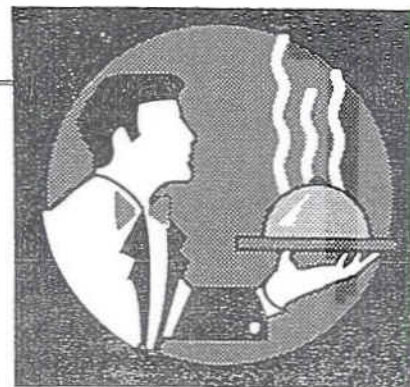
Grease discharges are predominantly generated from washing and cleaning operations and not from fryolators or deep frying units as most people might think. The pot washing sink, dishwasher pre-rinse station, and garbage grinder are the major sources of grease discharges to the sewer system.

## *How can grease discharges be controlled and minimized?*

There is only one way -- by installing and maintaining a grease removal or recovery unit (GRU).

## *What is a GRU?*

A GRU is a device designed to collect



and remove grease from wastewater discharged from restaurants and food preparation facilities. Most GRU's separate grease from water by gravity. Since grease weighs less than water, the grease floats and can be skimmed from the surface of the wastewater.

## *What types of Grease Removal Units are acceptable to the NBC?*

There are two (2) types of GRU's that are acceptable for installation in the NBC districts. One type of GRU is the automatic electrical/mechanical grease removal unit. This type of GRU is small, which allows installation in the kitchen under a sink or elsewhere. This type of GRU removes grease daily, collecting it neatly in a bucket from which it can be disposed in a dumpster or recycled through a rendering firm. Maintenance must be performed daily consisting of checking the grease collection bucket and cleaning a solids removal strainer.

Another acceptable GRU is the large in-ground passive type grease interceptor. This type of GRU must have a capacity of at least 15 gallons per seat in the restaurant with a minimum capacity of 500 gallons. This type of GRU is so large that it must be installed underground outside the facility. Maintenance requirements include weekly inspections to determine grease layer thickness and regular pumping of the grease by a certified



waste hauler. Pumped-out grease must be hauled to special facilities for processing or incineration.

*Is the small, under the sink passive type grease interceptor acceptable to the NBC?*

No, the NBC has found that these small, passive grease traps are not effective at removing grease because these units are considerably undersized, resulting in insufficient time for oil/ water separation. In addition, the small size of these passive units allows hot water from the pot wash sink to dissolve trapped grease in the unit and flush it into the sewer system. This type of grease trap is also maintenance intensive, requiring time consuming effort to perform system inspections or remove collected grease. Due to these intensive maintenance requirements this type of GRU is often neglected and does not perform properly. Therefore, the NBC does not allow installation of this type of GRU.

*Can a garbage grinder or garbage disposal unit be used in the restaurant or food preparation facility?*

Only if the garbage disposal unit discharges to a large in-ground passive type grease interceptor that has been properly sized for removal of settleable solids. Garbage disposal units may not be used in facilities with automatic under the sink type grease interceptors.

*Should a restaurant just go ahead and install a grease interceptor?*

Definitely not. Anyone proposing to install a grease interceptor must contact the NBC pretreatment staff at 461-8848 prior to purchasing or installing a grease interceptor. NBC staff will provide the guidance necessary to ensure that the GRU chosen meets all NBC criteria. Contacting the NBC in advance may prevent your company from purchasing expensive GRU retrofits should the initial installation not satisfy NBC criteria.

*Is there anything else that is required of restaurants or food preparation facilities?*

Yes. All restaurants and food preparation establishments must obtain a wastewater discharge permit from the NBC. A permit application can be obtained by contacting the pretreatment staff at 461-8848 or by visiting the Pretreatment Office at 2 Ernest Street in Providence.

*What is required by the Wastewater Discharge Permit?*

The restaurant discharge permit requires the restaurant or food preparation facility to maintain the GRU in a proper operating condition. A log book must also be maintained at the facility documenting the date of each GRU inspection and each GRU maintenance activity.

*What if I have more questions?*

Just ask us. The NBC has well trained and capable engineers, technicians, and others who would be happy to answer any question or concerns you may have regarding the Grease Removal Program, the permitting process, or the NBC in general. Feel free to call us! ■

valves on the truck, and hosing down the discharge area where spillage occurred.

- After cleaning up, the hauler is to proceed in a forward direction, since backing up is not allowed, and must be sure to exit the facility at a slow speed.

## WHAT ELSE SHOULD I KNOW?

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- The NBC runs the Septage facility as a service to Rhode Island's non-sewered residents. As such, only septage from within the state of Rhode Island may be brought to the facility. Any loads, or partial loads, from outside the state will not be accepted.

- The hauler must establish and maintain an account with a positive cash balance with the NBC Customer Service Section. The hauler will not be allowed to discharge without sufficient funds.

- Trucks with capacities less than 4,500 gallons are permitted to discharge between the hours of 8:00AM and 2:00PM, Monday through Friday and 8:00AM and 12:00 noon on Saturdays. Larger capacity trucks may discharge between the hours of 2:00PM and 4:00PM weekdays and 12:00 noon to 2:00PM on Saturdays.

- Once the NBC septage station receives 100,000 gallons of septage for any given day, only those trucks with full loads, all originating in the NBC primary service district, will be allowed to discharge. The NBC may only accept 116,000 gallons of septage daily, at which point the facility will close.

- Firms found to be falsifying paperwork submitted to the NBC and/or bringing non-residential quality septage to the facility may be subject to civil, criminal and/or administrative penalties. These penalties could include fines of up to \$25,000 per violation per day, revocation of permit and 30 days imprisonment for criminal violations.

- Haulers who discharge grease or other waste that causes the processing equipment to foul and/or breakdown will be immediately suspended from using the station for a minimum of a two-week period while NBC investigates the cause of the incident.

- Inquiries regarding permitting may be made to the NBC Pretreatment Section by calling (401) 461-8848 Ext. 483.



Narragansett Bay Commission  
Corporate Headquarters:  
1 Service Road, Providence, RI 02905  
Phone (401) 461-8848  
Fax (401) 461-6540

Pretreatment Office  
2 Ernest Street  
Providence, RI 02905  
Phone (401) 461-8848  
Fax (401) 461-0170

Lincoln Septage Receiving Facility:  
692 Washington Highway  
Lincoln, RI 02865  
Phone (401) 333-5610  
Fax (401) 333-5610



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## NARRAGANSETT BAY COMMISSION

### LINCOLN SEPTAGE RECEIVING FACILITY

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## *Septage Acceptance Policy Summary*



# OVERVIEW

The Narragansett Bay Commission (NBC) has upgraded the Lincoln Septage receiving station, installing new wastewater treatment equipment to reduce odors and remove solids contained in the septage. A six (6) inch hose connection has been installed to speed-up the discharge process and a computer tracking system has been installed for identification and billing streamlining purposes. This informational brochure provides an outline of procedures and practices which must be strictly followed to ensure the acceptance of your septage loads and the proper operation of the NBC facility.

## PERMITTING REQUIREMENTS

- All trucks and/or trailers must be permitted with the NBC prior to bringing septage wastewater for disposal. Any changes, such as new or deleted vehicles, must be made known to the NBC Pretreatment office by submitting a new permit application with the correct information. It is the haulers' responsibility to ensure all registrations, insurance and DEM permits for vehicles are obtained and maintained in a valid state.

- Each permitted truck and/or trailer must be weighed empty and full to determine the capacity of the vehicle. This process must be overseen by NBC Pretreatment personnel. Appointments must be

scheduled in advance at 461-8848 Ext. 483 for this purpose.

- All trucks and/or trailers must have a NBC computer tracking chip programmed with identification and capacity information affixed to it.

- All trucks and/or trailers must have Permit Fee Paid and Permitted Volume stickers affixed.

## MANIFEST REQUIREMENTS

- The manifest form must be completed in its entirety prior to arriving at the facility. The manifest requires the hauler to certify that only residential quality septage is contained in the truck that shall discharge.

- The manifest must clearly identify the origin of the load. The customer name, address and telephone number for that customer must be indicated for every load which is contained in the truck.

- A signature by the customer that your firm pumped must be on the manifest. If the customer was not home to sign the manifest, additional confirmation information regarding the customer is required in order to discharge the load. This could include a copy of the customer's signed check for the pump out or a photocopy of your company invoice to the customer. These documents must be attached to the manifest in lieu of a customer signature.

- Information provided on manifests is routinely checked by Pretreatment staff to verify the origin of the load. Pretreatment staff will routinely contact your customers.

## PROCEDURES TO BE FOLLOWED AT THE STATION

- Upon arriving at the station, the driver is to wait in line to use the facility.

- When it is your turn, the facility operator will inspect the stickers on your vehicle, scan your computer chip and take your manifest and other associated information. If anything is not in order, the load will be refused.

- Prior to discharging you must take a sample under the pervue of the station operator. This sample will be checked for pH and visual indications for grease or other suspected pollutants. The pH must be in the range of 5.5 to 12.0 standard units or the load will be refused. Detection of other suspected pollutants will also result in the load being refused.

- When given the OK to discharge, the hauler is to hook up to the six (6) inch discharge connection and proceed to empty the truck. Grease and/or gravel will foul the solids handling equipment and will be readily detected. **If your load contains grease and/or other dense solid material, such as gravel or rocks, do not bring it to the Lincoln facility.** It must be brought elsewhere for proper disposal.

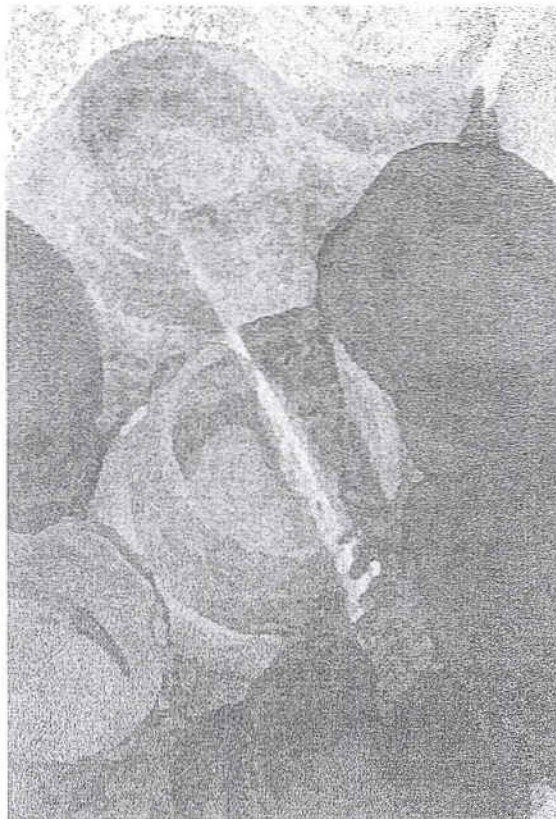
- Upon completing the discharge, the hauler must properly clean up and make the station neat and safe for the next hauler. This includes putting away all hoses, shutting all

NARRAGANSETT BAY COMMISSION

Environmental, Health & Safety

**BEST** MANAGEMENT  
PRACTICES  
*for*

FINE ART PAINTING STUDIOS



The purpose of this brochure is to guide you in protecting your health and preserving the environment as you work with various supplies and materials in your studio. It is also intended to help you save money and to maximize your existing environmental help efforts.

Following these guidelines will keep you and your environment safe.

### Sources of health & safety information on the Internet for artists

Disposal of household hazardous waste in RI:  
[www.ritrc.org/sie/cecodepot/ceco\\_dispoat\\_hocw.pdf](http://www.ritrc.org/sie/cecodepot/ceco_dispoat_hocw.pdf)

A searchable health & safety database by medium: [www.ritrc.org/sie/cecodepot/ceco\\_dispoat\\_hocw.pdf](http://www.ritrc.org/sie/cecodepot/ceco_dispoat_hocw.pdf)

List of references and more:  
[www.library.umsl.edu.au/internet/paint/html/arthazards.htm](http://www.library.umsl.edu.au/internet/paint/html/arthazards.htm)

Comprehensive list of articles covering many mediums:  
[www.crowweb.com/outreach/crowweb/links.cfm?topicID=2](http://www.crowweb.com/outreach/crowweb/links.cfm?topicID=2)

List of books, periodicals and organizations:  
<http://wally.ri.edu/pubs/guide/healthaz.html>

Comprehensive list of articles:  
[www.library.umsl.edu.au/internet/paint/html/arthazards.htm](http://www.library.umsl.edu.au/internet/paint/html/arthazards.htm)

Article entitled *Art, Painting and Drinking*:  
[http://www.ritrc.org/sie/cecodepot/ceco\\_dispoat\\_hocw.pdf](http://www.ritrc.org/sie/cecodepot/ceco_dispoat_hocw.pdf)

Very comprehensive list of resources for many media:  
[www.ritrc.org/sie/cecodepot/ceco\\_dispoat\\_hocw.pdf](http://www.ritrc.org/sie/cecodepot/ceco_dispoat_hocw.pdf)

Safety Primer with references:  
[www.nrc.gov/health/ehp/ehp26.htm](http://www.nrc.gov/health/ehp/ehp26.htm)

Safety Primers:  
[www.artspaceonline.org/solutions/safety.html](http://www.artspaceonline.org/solutions/safety.html)

[www.unl.edu/ehs/arthaz.html](http://www.unl.edu/ehs/arthaz.html)

[www.gambincolor.com/safety.html](http://www.gambincolor.com/safety.html)

Studio Ventilation:  
[www.craftsupport.com/nysh/industrial.htm](http://www.craftsupport.com/nysh/industrial.htm)

How to manage contaminated rags:  
[www.cohy.gov/p2/stoppow.pdf](http://www.cohy.gov/p2/stoppow.pdf)

Technical letters:  
<http://www.danrdmuth.com/letter.htm>

## NARRAGANSETT BAY COMMISSION Environmental, Health & Safety

# BEST MANAGEMENT PRACTICES

for

## FINE ART PAINTING STUDIOS



As you are probably aware, many art materials contain ingredients that are toxic to your health and the environment. The paints, pigments, colorants and glazes you use may contain toxic metals. Commonly-used paints, like oil, acrylic, watercolor and gouache, may contain heavy metals such as cadmium, chromium, and lead, which can be hazardous to your health and the environment. Also, oil paints contain solvents and require cleanup with solvents, such as turpentine, mineral spirits, or other paint thinners. Oil paints, resins, and solvents each pose fire safety hazards. Many solvents are toxic and flammable, and their use contributes to the formation of ground-level ozone, contaminating the air we breathe, and a few can deplete the ozone layer in our stratosphere. Potentially increasing our exposure to harmful effects of the sun. If improperly disposed of, these materials pose environmental and community health hazards. You can reduce these risks by determining which materials contain hazardous ingredients, and by finding and using safer alternatives. If an alternative is not available, then you must know how to use and dispose of the hazardous materials safely. Remember that even less toxic alternatives must be handled safely and disposed of properly.

Use of many of these materials can produce wastes controlled by a variety of local, state and federal requirements, such as Rhode Island's Hazardous Waste Management Act, which authorizes the RI Department of Environmental Management (RIDEM) to regulate hazardous waste management and disposal, and the federal Clean Water Act which authorizes both RIDEM and local sewer authorities such as the Narragansett Bay Commission (NBC) to regulate wastewater disposal to Publicly-Owned Treatment Works (POTW). Sewer authorities have obligations under the Clean Water Act to regulate sources (such as painting studios) that discharge process wastewater into the sewer system. The practices recommended in this guidance document can help you to understand, and minimize or eliminate hazardous materials and wastes from your work. This may eliminate the need for you to obtain permits from these government agencies

Wise purchasing choices will help you reduce or eliminate hazards in your studio. Tables 1 and 2 provide information about metals and solvents in pigments to help you choose safer materials for your work. You may be able to choose less toxic paints by comparing the information from the Material Safety Data Sheet (MSDS) about the types and amounts of metals contained in your paints (see Table 2). For example, you may select a paint containing an iron-based pigment rather than a more toxic lead chromate or cadmium pigment. You can also compare properties of available solvents to decide which is best for your purpose and which is a safer choice.

When you are deciding which solvent to use, consider that you may reduce your health risks by using solvents with low values for any or all of the following characteristics: toxicity, evaporation rate, flammability, photochemical reactivity, ozone depleting potential, Worker Exposure Value and Environmental Hazard Value. Also look for a low Vapor Pressure, which indicates how quickly the solvent will evaporate into the air you breathe (see Table 1). Low-odor mineral spirits would be a safer choice than regular mineral spirits or turpentine. Finally, buy only as much material as you need to complete your work so that you are not unnecessarily storing large amounts of hazardous materials in your studio.

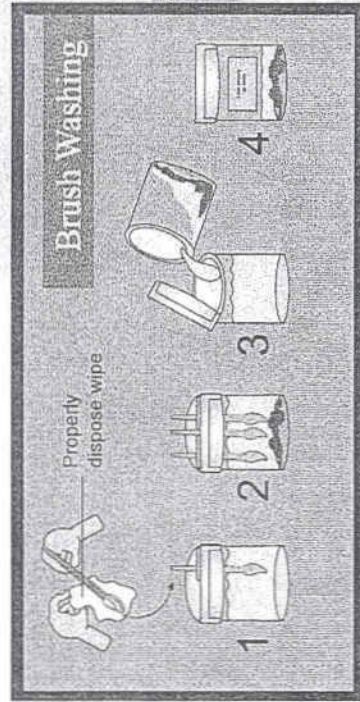
Store supplies and materials properly by following the manufacturer's instructions. Incompatible materials must be stored separately, in covered and labeled containers, so they do not react (see Table 1). For example, products containing oxidizers, such as bleach, should be stored in a location separate from flammable materials to reduce potential fire hazards and other dangerous reactions. Label all products with the date of purchase and the date you open the container. Use an indelible marker or graphite pencil to label each container, and replace the label if it becomes illegible. Maximize the shelf life of your materials by keeping air out of paint cans and tubes. Use oldest supplies first and do not keep supplies that you will never use again. Donate excess stock to someone who can use it, such as another artist, local theater group, art schools or a materials exchange ([www.ritrc.org/sie/cecodepot/ceco\\_dispoat\\_hocw.pdf](http://www.ritrc.org/sie/cecodepot/ceco_dispoat_hocw.pdf)).

Exposure to solvents and toxic metals can be dangerous to your health. Common routes of exposure include ingestion, inhalation and absorption through the skin. Less toxic substitutes can often be used both in your painting process and for clean-up. Oil paint can be cleaned off hands and brushes with baby oil, followed by soap and water. Soap and water alone may be adequate if you are using acrylic paints, gouache or watercolors. Solvents such as mineral spirits, turpentine or other paint thinners may be needed for more demanding jobs. Before you use straight solvents, try a 50:50 mixture of baby oil and solvent. If using a mixture doesn't work, and you need to use a straight solvent, read the product information for alternative products to choose a less toxic solvent.

To use these paints and solvents safely, follow recommendations on the product's label, MSDS and Technical Data Sheet. Ventilate the work area whenever possible to remove airborne pollutants. Avoid using powders that generate airborne dusts. The dust may contain toxic metals, which cause serious harm when inhaled, absorbed, or ingested. If you are unable to remove these hazards from your workplace, you should eliminate or reduce bodily contact by using personal protective equipment such as gloves, safety glasses/goggles, aprons and other barriers to avoid absorption of metals and solvents through the skin. In addition, consider using appropriate respiratory protection when spray painting or working with powders, and always when recommended on a product's MSDS, to prevent inhalation of toxic materials. There may be certain health considerations when choosing a respirator, so please consult with a medical professional before making your purchase.

To expedite clean up and to reduce solvent use, squeeze excess paint off brushes, rollers or thinners, and when possible, put it back into the original labeled paint container. To minimize the amount of water or solvent needed to clean brushes, paint-out the paint remaining on a brush after a project is complete. Other water conservation methods include wash water reuse and counter-current rinsing. Sometimes, clean-up will require a strong solvent such as mineral spirits, turpentine or other paint thinners. To clean brushes and reuse solvent, hang your brush so that the bristles are covered by solvent but do not touch the bottom of the container. Most pigment solids will separate from the solvent, falling to the bottom of the container. When the brush is clean, remove it and slowly pour the solvent into a clean container, being careful not to disturb the solids at the bottom of the original container. This will allow you to reuse the solvent and properly dispose of the solids in the bottom of the original container. (See the disposal paragraph below.) Remember to cover all solvent containers, even while your brushes are soaking, to reduce fumes in your work area and to prevent fire and personal exposure. Use a temporary aluminum foil cover, perforated plastic cover or other cover (your brush handle may stick out through the cover) to cut down on the amount of vapors that escape into your work environment. This option should be for short term storage only while you are working with the materials. These tops will fail to prevent spills if the container tips over. Some plastic tops are fire for solvent storage. Many paint solvents are sold by the manufacturer in plastic containers. Remember to check containers periodically to ensure they will hold up for extended periods of time.

The best solution for long-term solvent storage is to put it back into its original container.



REMOVE excess paint from brush. SOAK the suspended brush vertically in paint thinner.

SETTLE pigments.

DECANT the good thinner into a new container so it can be reused again.

LABEL and properly manage the residue.

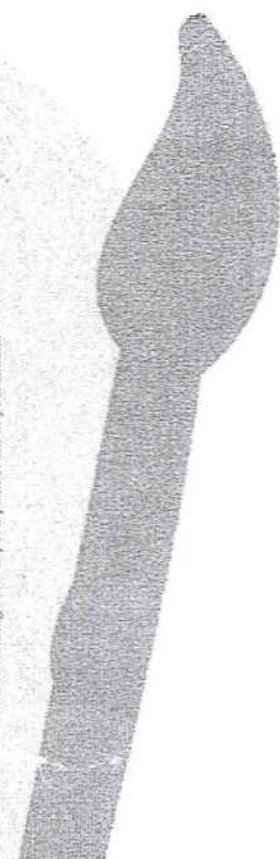
Do not put even small amounts of waste oil paint or solvents down the drain, because they can ultimately reach Narragansett Bay. Sewage treatment plants are not designed to treat these substances. These materials harm sewer workers, cripple the biological sewage treatment process, and can cause fish-kills in the receiving waters. If as part of doing business you put rinse-water, wash-water or other process wastewater down a drain to the sewer system, you must contact your local sewer authority (i.e. NBC) to determine if a wastewater discharge permit is required. The practices recommended in this guidance document can help you to understand and minimize or eliminate hazardous materials and wastes from your work. This may eliminate the need for you to obtain permits or it may reduce your permit requirements and costs.

Properly dispose of spent solvents, paint wastes, aerosol paint cans, and other wastes generated in your studio. Hazardous wastes generated by household sources (including non-commercial artists) in Rhode Island, can be dropped off free of charge at the Rhode Island Resource Recovery Corporation's Eco-Depot in Johnston. Non-hazardous waste can be disposed of with your municipal trash. In Rhode Island, a waste is considered hazardous if it is flammable/ignitable with a flashpoint less than 200 F (see MSDS), or if it contains toxic heavy metals above a TCLP concentration. Toxic heavy metals include Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Silver, and Selenium (see Table 2 for more information). If you are using these types of materials then you should consider the wastes to be hazardous and dispose of them as such. They should be stored in covered and labeled fireproof containers. Wipes must be handled as hazardous waste if they are saturated (dripping) with liquids that are considered hazardous wastes. If you use wipes in your clean-up, you need to drain any liquid or solvent from them and then dispose of the wipes separately from other trash. Otherwise dispose of dry non-hazardous wipes as municipal trash. Small amounts of non-hazardous waste paint can be air-dried and also disposed of as municipal trash.

Commercial artists are considered a small business and must abide by different regulations for hazardous waste disposal than home hobbyists. Commercial artists cannot use the RIRRC's Eco-Depot to dispose of hazardous wastes. If you are a commercial artist who generates hazardous waste, you must register with the RIDEM as a hazardous waste generator. You must also hire a licensed hazardous waste transporter to remove waste for proper recycling, treatment and disposal at an approved site. For more information on your hazardous waste responsibilities, see RIDEM's "Hazardous Waste Compliance Workbook for Rhode Island Generators" at: <http://www.state.ri.us/dem/epa/pgrm/whc/ben/ben.htm> or call RIDEM at (401) 222-6800.

Pick up spills promptly and then safely reuse or properly dispose of the recovered material. Keep adequately stocked spill kits at locations where they will be needed, and know how to use them. When you are using powders, wipe up small areas with a damp cloth instead of using a wet-mop or broom. Clean larger areas with a vacuum cleaner equipped with a high-efficiency particulate air (HEPA) filter. Following these suggestions will help you avoid undesirable wastewater and airborne dusts. Never use a wet-vac to clean a solvent spill, because the vapors can explode in the vacuum. Instead, wipe up the small solvent spill with a rag, drain the rag, then dispose of it and the waste solvent as if it were hazardous waste. Use personal protective equipment such as gloves and respirators. Be sure to contact the RIDEM in the case of a large solvent spill to request assistance and spill clean-up guidance.

Practice good housekeeping to promote a safe and efficient work environment. Properly manage shop towels, wipes and rags in your studio. Store wipes that have been in contact with flammable materials (such as certain paints and solvents) in a self-closing fire-proof canister until ready for disposal. Wash dirty studio clothing separately from your other laundry to avoid cross-contamination. Be aware that your shoes can become a source of toxic metal contamination in your home, because you may track paints and dusts from the studio into your living area. Wipe your feet or have separate studio shoes for your work. Always wash your hands before eating or smoking, and wash your hands periodically during the day as you work. Do not put your hands near your eyes, nose, or mouth while working. Never put a paint brush in your mouth.



## E,H & S Reference Information

Table 1 - Environmental and Health Hazards of Solvents

Organic Compound	EHV	WHV	HV <sub>avg</sub>	Exposure Limit (ppm)	Flash Point (F)	Vapor Pressure (mmHg)	Water Solubility (%)	Fire Hazard Classification	Notes
Acetone	1.6	1.6	2	250	0	100	100	IB flammable	solvent, incomp. w/acids
2-Butoxyethanol	2.5	1.6	2	5	143	1	100	IIIA combustible	miscibility agent, skin adsorbs, incomp. w/caustics
D-Limonene	1.1	0.5	1	30	120	20	0	II combustible	has citrus odor
Ethyl Acetate	3.6	2.6	3	400	24	73	10	IB flammable	solvent, incomp. w/nitrates, alkalis & acids
Isopropyl Alcohol	1.4	1.5	1	400	53	33	100	IB flammable	solvent, incomp. w/ acids and chlorine
Methyl Ethyl Ketone	3.9	1.6	3	200	16	78	28	IB flammable	paint remover, waste may fail TCLP, incomp. w/ ammonia
Methylene Chloride	3.3	2.8	3	none	none	350	2	—	solvent, incomp. w/ acids and chlorine
Mineral Spirits	1.5	1.9	1	100	104	2	0	II combustible	thinner, may contain 2, 8 or 22% aromatics
VM & P Naphtha	1.3	1.3	1	350	40	20	0	II flammable	may contain 1, 2 or 20% aromatics
Odorless Mineral Spirits	1.1	1.2	1	200	104	1	0	II combustible	thinner, may contain up to 0.25% aromatics
Toluene	3.7	2.1	3	100	40	21	0	IB flammable	solvent, aromatic T10, skin adsorbs
Turpentine	na	na	na	100	65	4	0	IC flammable	thinner, skin adsorbs, incomp. w/ chlorine
Xylene	3.9	1.3	3	100	80	8	0	IC flammable	aromatic, skin adsorbs, incomp. w/ strong acids

- Organic compounds, such as those listed above, can be found alone or in mixtures which are used to dilute (thin) paint, strip paint, dissolve resin, make medium or for cleanup. The health and environmental values of greatest concern are bolded.
- Environmental Hazard Value (EHV) accounts for impacts on aquatic ecosystems, air quality and land contamination.
- Worker Hazard Value (WHV) accounts for impacts on human health in a work environment. Although a low WHV is safest, the release, inhalation, ingestion, skin/eye and other contact with organic solvents should be avoided.
- Average Hazard Value (HV<sub>avg</sub>), where 1 is safest is equal to the average of the EHV and the WHV.
- Sewer regulations prohibit businesses from discharging flammable liquids, hazardous waste, solvents, paint thinner or stripper, methylene chloride, naphtha, toluene, and xylene and also limit the amount of other organic and inorganic compounds that can be discharged into the sewer.
- When solvent use is necessary, maximize safety by choosing one that has a high exposure limit, high flash point, low vapor pressure and a low hazard value.

Table 2 - Environmental and Health Hazards of Metals

Metal	EHV	WHV	HV <sub>avg</sub>	NBC limit (mg/l)	RCRA TCLP (mg/l)	PBT	Exposure Limit (mg/m <sup>3</sup> )	Carcinogen	Used in Paint Colors including:	Notes
Arsenic	3.9	2.2	3	0.10	5		0.002	Y	W	skin adsorbs
Barium	0.4	0.8	1	none	100		0.5		W	PEL is for soluble barium compounds
Cadmium	4.1	2.4	3	0.07	1	Y	0.005	Y	W	a PBT according to the Ecology PBT Working List
Chromium	4.7	1.9	3	1.63	5		0.5	Y	W	Hex chrome is more toxic than trivalent form
Copper	3.0	2.9	3	1.20	none		1.0		W	prevent skin & eye contact
Lead	4.1	2.6	3	0.29	5	Y	0.05	Y	W	prevent skin & eye contact
Mercury	4.0	1.7	3	0.005	0.2	Y	0.05		W	volatile; prevent skin contact
Nickel	4.0	2.4	3	1.62	none		0.015	Y	W	insoluble Ni compounds carcinogen per ACGIH
Selenium	2.4	1.9	2	0.20	1		0.2	Y		prevent skin contact
Silver	1.4	1.9	2	0.20	5		0.01			prevent skin & eye contact
Tin	0.1	1.8	1	2.00	none		2.0			incompatible with turpentine
Zinc	0.4	1.7	1	1.39	none		5	Y	W	PEL is for zinc oxide

- The health and environmental values of greatest concern are bolded. The lowest NBC wastewater discharge limit for each metal is shown.
- The average of the Environmental (EHV) and the Worker Exposure Hazard (WHV) values is equal to the Average Hazard Value (HV<sub>avg</sub>), where 1 is safest.
- A substantial portion of metal in dry paint is relatively immobile when used as intended.
- Metals that tend to have a relatively high PEL (ex. 15 mg/m<sup>3</sup>) include calcium, aluminum and iron.
- The risk of inhaling metals are highest for fine art painting operations involving spray painting, airbrushing, sanding, dry powders & chalks and torching.
- Other metals of concern that can be found in oil, watercolor and other paints include antimony, cobalt, manganese, molybdate, strontium and titanium.

### Useful Information and Definitions

**Corrosives** Corrosives are acids (e.g. nitric acid, hydrochloric acids or ferric chloride) that have a pH below 2 and alkalis (e.g. sodium hydroxide or lye) that have a pH above 12.5 standard units.

**Environmental, Health and Safety (EH&S)** agendas protect our environments and human health. Note that certain substances that are relatively safe to work with may still be harmful to the environment.

**Flash Point** is the lowest temperature at which a solvent will flame when an ignition source is present.

**Halogenated** compounds contain chlorine, bromine or fluorine. In the upper atmosphere, halogenated organic compounds are most notorious for being ozone depleting substances (ODS). Certain halogenated compounds are also direct (i.e. methyl chloroform) or indirect (i.e. methylene chloride) greenhouse gases (GHG). Many halogenated organic compounds are carcinogens and do not have a flash point.

**Material Safety Data Sheet (MSDS)** chemical manufacturers supply a MSDS to inform industrial purchasers and users of hazardous chemicals of the reasonably foreseeable physical and chemical hazards that may arise from the use of those chemicals.

**Oxidizing** compound is a reactive chemical such as bleach, chlorine, hydrogen peroxide and nitric acid.

**Permissible Exposure Limit (PEL)** is the maximum concentration of a chemical in air that a worker can be exposed to without health consequences.

**Persistent Bioaccumulative Toxics (PBT)** are highly toxic compounds that last a long time and build-up to high levels in the food chain.

**Publicly Owned Treatment Works (POTW)** is a sewage treatment facility.

**Resource Conservation and Recovery Act (RCRA)** is the federal law that governs the disposal of hazardous waste.

**Solvent** is a typically volatile, organic (aliphatic, aromatic or unsaturated) liquid capable of dissolving other compounds such as paints, oils or resins. Organic solvents are incompatible with oxidizers.

**Total Toxic Organics (TTO)**, including methylene chloride and toluene, are listed in 40 CFR Section 433.111e), Total Toxic Organics definition (Appendix 9.1).

**Toxicity Characteristic Leaching Procedure (TCLP)** is one of the tests for 40 compounds that can characterize a waste as hazardous.

**Vapor Pressure** is a direct indication of how quickly a substance will evaporate. An organic compound with a vapor pressure over 2 mmHg is considered volatile.

**Volatile Organic Compounds (VOCs)**, especially aromatics (i.e. toluene and xylene) that are the most photochemically reactive VOCs, are notorious for causing smog (ozone in the lower atmosphere). Certain VOCs are also direct (i.e. ether) or indirect (i.e. aromatics) greenhouse gases.

This brochure was funded in part by a US EPA Region 1 grant and the Narragansett Bay Commission and was produced by a working group of art and environmental professionals including: Pamela Gaili (RIDEM), Alan Cantara (RISD), Rafael Cuello (NBC), Kathie Florshelm (Photographer), Rebecca Poiva (RISD), Randall Rosenbaum (RISCA), and Barry Weiskowitz (NBC).

### RI Agencies Providing Further Information

Narragansett Bay Commission (NBC)  
(401) 461-8848 - www.narrabay.com

RI Department of Environmental Management (RIDEM)  
(401) 222-6822 - www.state.ri.us/dem

RI Dept. of Health, Occupational Health & Safety Consultation Services  
(401) 222-2438 -

www.health.state.ri.us/environment/occupational/Home.htm

RI Resource Recovery Corporation (RIRRC)  
(401) 942-1430 - www.rirrc.org

RI School of Design (RISD)  
(401) 454-6780 - http://intranet.risd.edu/departments/default.asp?department=Environmental\_Health\_and\_Safety

RI State Council on the Arts (RISCA)  
(401) 222-5880 - www.risca.state.ri.us

### Other Agencies

Art and Creative Materials Institute (ACMI)  
(617) 426-6639 - www.acmi.net.org

Arts, Crafts, and Theater Safety (ACTS)  
(212) 777-0062 - www.caseweb.com/acts

Massachusetts and Rhode Island Poison Center  
(800) 222-1212 - www.maripoisoncenter.com

National Institute for Occupational Safety and Health (NIOSH)  
(800) 356-5674 - www.niosh.com/my

Occupational Safety and Health Administration (OSHA)  
(202) 523-7075 - www.osha.gov

RCRA Hotline  
(800) 424-9346 - www.epa.gov/epaoswer/hotline



Narragansett Bay Commission  
One Service Road  
Providence, RI 02905



NARRAGANSETT BAY COMMISSION  
Environmental, Health & Safety

**BEST** MANAGEMENT  
PRACTICES  
*for*  
FINE ART PAINTING STUDIOS







# Narragansett Bay Commission

## Electroplaters, Metal Finishers, Chemical Processing Firms and Other Industries:

### Vacation Shutdown Prohibited Sewer Discharges

Typically many industries shut down their operation for a period of time during the holiday months. Past operating experiences in the Narragansett Bay Commission (NBC) District have shown that large quantities of toxic and hazardous wastes have been indiscriminately dumped in significant quantities into the sewer as part of an industry's "clean-up" procedure prior to their shutdown. This usually occurs in the last two weeks of June and throughout the month of July, as well as in December. Pursuant to Title 46 Chapter 25 of the Rhode Island General Laws, the NBC has adopted regulations which prohibit the discharge of wastes which could:

- create a fire or explosion (example: solvents such as trichloroethylene, xylene or gasoline);
- cause corrosive damage to our facilities (example: acids or bases);
- hinder the flow or causes obstructions to our facilities (example: fats, waxes, greases, oils, solids);
- result in an excessive hydraulic/pollutant flow rate (example: slug discharge from the dumping of plating or other baths);
- interfere with treatment facility operations (example: dumping cyanide or heavy metal containing solutions) and;
- cause pass through of the wastewater treatment facility (example: dumping of dyes or pigments).

Other wastes are also regulated specifically by type of waste and concentration by the NBC's Rules and Regulations. Copies of these regulations may be obtained at the NBC's Pretreatment office. In addition, it is illegal to discharge any non-sanitary wastewaters into the NBC sewer system prior to being issued a discharge permit. Please dispose of spent solutions properly. It is less costly than being caught illegally disposing of these wastes. Industries found to be in violation of the NBC's Rules and Regulations may be subject to a fine of up to \$25,000 per violation per day and/or up to thirty (30) days of imprisonment. In general, industries located in the NBC service area are to be commended for the fine job to date at reducing toxic discharges to the sewer. In 1981, local industries discharged 954,099 pounds of heavy metals such as copper, nickel, and zinc, and 80,440 pounds of cyanide to the Field's Point Treatment Facility. A portion of these toxics would eventually pass through the treatment plant and enter Narragansett Bay. There has been a 97.0% reduction in heavy metal discharges to the Field's Point Facility since 1981. The cyanide loadings to this treatment facility were also reduced by 97.6% over this same period. This impressive reduction in toxic discharges by industry has also been noted at the Bucklin Point Wastewater Treatment Facility. The level of toxics entering Narragansett Bay from the NBC facilities has been similarly reduced.

*The NBC will continue to be a leader in the field of wastewater treatment and environmental protection to ensure a cleaner Narragansett Bay for all to enjoy. For more information on the proper disposal of wastes from your facility, contact the pretreatment program staff at 461-8848 ext. 490 / TDD 461-6549.*

Vincent J. Mesolella, *Chairman*

Raymond J. Marshall, P.E., *Executive Director*

***ATTACHMENT VOLUME I***

***SECTION 2***

***TYPICAL WASTEWATER  
DISCHARGE PERMITS***

***TYPICAL METALFINISHER  
WASTEWATER DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: P1106-341-1216

Company Name: **SURFACE COATINGS DIVISION, MFB LLC**

Facility Address: 26 Plymouth Street, Providence, RI 02907

Mailing Address: P. O. Box 27039, Providence, RI 02907

Facility President: Mr. Mark F. Bouchard

Facility Authorized Agent: Mr. Neil A. Swanson

User Classification: Metal Finisher

Categorical Standards Applicable: 40 CFR §433.17, Pretreatment Standards for New Sources

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Mr. Mark F. Bouchard and Surface Coatings Division, MFB LLC**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 21 pages with conditions A - X.

**This permit is effective on January 1, 2012  
and expires on December 31 2016.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission**:

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager  
Narragansett Bay Commission

December 16, 2011  
Date

**NOTE:** The NBC will accept the person(s) named on this permit as the **Permittee's** authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the **Permittee's** by-laws or per a vote of the directors if the **Permittee** is a corporation; a general partner or proprietor if the **Permittee** is a partnership or sole proprietorship respectively; or a duly authorized representative of an individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the **Permittee**. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

## CONDITIONS TO PERMIT

### **A. Effluent Discharge Limitations:**

1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 20, attached hereto and incorporated herein.
2. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
3. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
4. The permittee agrees that the average discharge per calendar day of metal finishing process wastewater is greater than or equal to 2,500 gallons but less than 10,000 gallons. Decreasing or increasing the average daily water usage may affect the annual permit fee and/or the monitoring frequency. The permittee must notify the NBC of any deviations from the aforementioned average flow range so that required permit modifications may be made.
5. The permittee is classified as a Metal Finisher and, therefore, must at all times comply with EPA Categorical Regulations 40 CFR §433.17, Pretreatment Standards for New Sources. EPA regulations require that Metal Finishers maintain full compliance with the EPA Total Cyanide Metal Finishing maximum limit of 1.20 ppm and the monthly average limitation of 0.65 ppm at the combined point of cyanide process discharge, prior to combining with non-cyanide bearing wastewater streams, and at the discharge from the cyanide treatment system. Upon conducting an engineering review of the facility, it has been determined that all waste streams have the potential to be contaminated with cyanide due to the configuration of the electroplating operation. Therefore, the EPA Total Cyanide Metal Finishing limitations will be enforced at the final discharge location, the sample port on the discharge line of the second stage pH adjustment system, Sample Location #1. The NBC effluent discharge limitations for Total Cyanide are more stringent than the EPA Total Cyanide limitations at the final effluent. Therefore, the NBC Total Cyanide limitations will be enforced at the final discharge location.

## **B. Permitted Discharges:**

1. The permittee is authorized to discharge the following tanks, solutions or process wastewater streams to the NBC's facilities:
  - a. Treated Metal Finishing Rinsewaters;
  - b. Treated Anti-Rust Solution;
  - c. Boiler Blowdown;
  - d. Steam Condensate;
  - e. Cooling Tower Discharges.
  
2. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

## **C. Prohibitions:**

1. The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
  - a. Concentrated Electroplating Solutions;
  - b. Concentrated Cyanide Solutions;
  - c. Nickel Plating Rinsewater;
  - d. DI Rinsewaters;
  - e. Ion Exchange Column Regeneration Wastewater;
  - f. Alkaline Cleaner;
  - g. Aqueous Cleaner;
  - h. Dilute Sulfuric Acid Solutions;
  - i. Tin Stripper Solution;
  - j. Chromate Solutions;
  - k. Acid Still Rinsewaters;
  - l. Dilute Hydrochloric Activator Solution;
  - m. Electroless Nickel Plating Solution;
  - n. Soak Cleaner Solution;
  - o. Electrocleaner Solution;
  - p. Acidic Solutions with a pH less than 5.0 standard units;
  - q. Caustic Solutions with a pH greater than 11.0 standard units;
  - r. Degreasing Solutions;
  - s. Solvents;
  - t. Sludges;
  - u. Fuel or Lubricating Oils.

2. The permittee is strictly prohibited from batch discharging the entire contents of the cooling tower without first receiving approval from the NBC prior to discharge. In order to receive approval, the contents of the boiler must be sampled in accordance with Section G(5) of this permit.
3. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) of this permit or wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 20, attached hereto and incorporated herein.
4. The permittee may only treat and/or discharge those solutions that were indicated as such on plans received by the NBC by the permittee on June 7, 2001, February 26, 2007, March 7, 2007, May 12, 2009, and April 9, 2010. The permittee is strictly prohibited from discharging any other tanks, solutions, chemicals or materials, including all prohibited substances as defined in the Rules and Regulations of the Narragansett Bay Commission, without written approval from the NBC.
5. The permittee is strictly prohibited from using portable pumps and/or flexible hose to transfer solutions directly to the pretreatment system or to bypass the pretreatment system and/or discharge solutions directly to the sewer without written approval from the NBC.

#### **D. Pretreatment Requirements:**

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of three (3) sample locations must be provided and must collect wastewater from the process operations indicated as follows:
  - Sample Location #1 - Sample port on the discharge line from the second stage of the pH adjustment system, collecting all process discharges specified in Section B(1)(a through d) of this permit.
  - Sample Location #2 - Sample port on the anti-rust solution tank (Tank 56), collecting all process discharges specified in Section B(1)(b) of this permit.
  - Sample Location #3 - Sample port on the discharge pipe of the cooling tower, collecting all process discharges specified in Section B(1)(e) of this permit.



The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Locations #1 and #3 must be in compliance with the effluent limitations specified in Section A and Table 1 of this permit. The discharge through Sample Location #1 must be in compliance with the EPA Metal Finishing Standards referenced in Section A(5) of this permit. The discharge through Sample Location #2 must be in compliance with the concentrated discharge formula referenced in Article 2 of the NBC Rules and Regulations.

2. The permittee shall operate and maintain a pretreatment system in conformance with plans received by the NBC on January 14, 1997 and March 10, 2004. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.
3. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.

#### **E. Boiler Facility Requirements:**

1. The permittee has hard plumbed all boiler blowdown and steam condensate discharges to the pretreatment system. A sample port has been installed on each boiler room process water discharge line. The sample port must have a minimum of an eight (8) inch clearance from the floor so that a sample bottle can be inserted. Daily visual inspections of steam condensate must be documented in the logbook as required in Section H of this permit.
2. The permittee has permanently sealed all open floor drains and any other open process wastewater and sewer discharge connections within the boiler facility, so as to prevent an incidental or accidental discharge from the boiler room.
3. The permittee has permanently sealed all drains within oil storage tank vaults or located under buried tanks which connect to the sewer, so as to prevent an incidental or accidental discharge.
4. The permittee shall oversee each oil tank filling to ensure fuel oil does not spill from the fill, overflow or vent locations and discharge to the sewer. Each tank filling operation must be documented in the logbook required in Section H of this permit.
5. The permittee is strictly prohibited from discharging spilled oil contained in the boiler facility, fuel storage area(s), etc. into the sewer. Spilled oil must be collected for proper off-site disposal. The permittee must take appropriate measures as described above and any others necessary to ensure a spill will not discharge to the sewer system.

## **F. Zero Discharge/Recycle Operation Requirements:**

1. The permittee shall operate and maintain a Zero Process Discharge Wastewater Recycle Pretreatment System as proposed in the plans that were received by the NBC on November 1, 1996. This pretreatment system shall be used specifically for the purpose of recycling wastewater or eliminating discharges from the following process operations:
  - a. Nickel Plating Rinsing;
  - b. Hot DI Rinse;
  - c. DI Rinse.
  
2. The permittee shall operate and maintain a Zero Process Discharge Wastewater Evaporation System as proposed in the plans that were received by the NBC on April 1, 1995 and April 9, 2010. This evaporation system shall be used specifically for the purpose of eliminating discharges from the following process operations:
  - a. Ion Exchange Column Regeneration Wastewater;
  - b. Alkaline Cleaner;
  - c. Aqueous Cleaner;
  - d. Dilute Sulfuric Acid;
  - e. Tin Stripper;
  - f. Clear Chromate Solution;
  - g. Acid Still Rinse;
  - h. Dilute Hydrochloric Activator;
  - i. Electroless Nickel Plating Solution;
  - j. Soak Cleaner;
  - k. Electrocleaner.
  
3. The permittee shall make no changes to the process tanks or pretreatment system without first submitting plans to the NBC for approval. Only those solutions indicated as being discharged to the treatment system on the plans received by the NBC on April 1, 1995, November 1, 1996, and April 9, 2010 may be treated on-site in the pretreatment equipment.
  
4. If any problems with the recycle and/or evaporation systems arise or if the permittee would like to connect to the sewer for the purpose of discharging any process wastewater streams specified in Sections F(1) and F(2), the permittee must notify the NBC, in writing, and obtain written approval from the NBC before resuming discharge or making any physical changes to the process tanks, the pretreatment recycle and/or evaporation systems, or associated piping.
  
5. The permittee shall post signs at all sanitary sewer connections in the areas of the facility specified in Sections F(1) and F(2) stating the following: "Discharge of Chemicals Prohibited by Rhode Island Law".

6. Failure to notify NBC personnel prior to resuming process wastewater discharges to the sewer may be considered an intentional violation of the NBC's Rules and Regulations and may subject the permittee to civil and/or criminal penalties as defined in R.I.G.L. §46-25-25.2 and §46-25-25.3.

**G. Monitoring Requirements:**

1. The permittee shall monitor the pH of the effluent discharge and record it continuously. The permittee shall report the results monthly in a summary report giving the maximum, minimum and average pH readings for each day of operation (see sample copy enclosed). The data must be reported directly from the recording chart to an accuracy of 0.1 standard units. The pH Monitoring Report must be received by the NBC within thirty (30) days from the end of the month in which the data is recorded. The original recording chart must be maintained on site for a period of at least three (3) years.
2. During the first full normal week of operations, the permittee shall conduct wastewater sampling on each of four (4) consecutive operating days as follows:
  - a. A composite sample is to be collected on each of the four (4) consecutive days. Each of the four (4) composite samples is to consist of equal volume grab samples collected at least every half hour over the operating day or collected continuously with a composite sampler. The samples are to be collected from the sample port on the discharge line from the second stage of the pH adjustment system, Sample Location #1. Each of these four (4) composite samples are to be collected, preserved, and analyzed in accordance with EPA protocols separately for the following parameters:

Cadmium (Total)	Copper (Total)	Silver (Total)
Chromium (Total)	Lead (Total)	Zinc (Total)
	Nickel (Total)	

- b. On the same four (4) days that the composite samples listed in Section G(2)(a) above are being collected, the permittee shall collect a minimum of four (4) grab samples at equidistant time intervals over each entire operating day from the sample port on the discharge line from the second stage of the pH adjustment system, Sample Location #1. Each grab sample must be preserved immediately upon sample collection in accordance with EPA regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If residual chlorine is present in the sample, then 0.6 grams of ascorbic acid must be added. The sample should then be retested for chlorine residual, and if it is present, the addition of ascorbic acid should be repeated. Once residual chlorine has been eliminated from the sample, the pH of the sample must be checked and elevated to greater than 12.0 standard units by the addition of sodium hydroxide, if necessary. Once the grab sample has been preserved to a pH greater than 12.0 standard units and no chlorine residual is detected, it may be composited with the other grab

samples collected on that operating day. Each of the four (4) daily composite samples consisting of the four (4) preserved grab samples must be refrigerated until analysis and must be analyzed separately within fourteen (14) days of collection for **Total Cyanide**.

- c. Four (4) grab samples are to be collected from the sample port on the discharge line from the second stage of the pH adjustment system, Sample Location #1 at equidistant time periods on the same four (4) operating days (i.e., one (1) sample every two (2) hours over the course of an eight (8) hour operating day). Each grab sample is to be collected in a glass bottle with a Teflon lined cap with a volume of either 25 or 40 ml. Each grab sample must immediately be tested for residual chlorine with potassium iodide paper. If residual chlorine is present in the sample, then 0.008% by volume of sodium thiosulfate must be added (i.e. 2 mg per 25 ml of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate should be repeated. Once chlorine residual has been eliminated from the sample, the sample should be stored in the dark and refrigerated at a temperature of 0 - 4°C until analysis. No air bubbles may be present in any grab sample or that sample must be discarded. Each grab sample is to be analyzed separately and the mathematical average reported. Alternatively, the grab samples may be composited in the laboratory at a temperature of 0-4°C immediately before analysis. All samples must be analyzed within three (3) days of collection for the **Volatile Organic Compounds (purgeables)** fraction of the Total Toxic Organics (TTO) list enclosed.
  - d. The analytical results are to be received by the NBC by March 1, 2012. All sampling and analyses are to be done in accordance with EPA approved procedures (40 CFR §403 and 40 CFR §136). These results are to be accompanied by a certified laboratory analysis sheet including chain of custody documentation, indicating the EPA approved test procedure for each parameter listed. A completed Self-Monitoring Compliance Report form must also accompany each set of results (see sample copy enclosed).
3. The permittee shall conduct sampling over one (1) full normal operating day during the months of February, April, June, August, October, and December until the expiration date of this permit.
- a. A composite sample is to be collected which must consist of equal volume grab samples collected at least every half hour over the operating day or collected continuously with a composite sampler. The samples are to be collected from the sample port on the discharge line from the second stage of the pH adjustment system, Sample Location #1. The composite samples collected in April and October are to be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total)	Copper (Total)	Silver (Total)
Chromium (Total)	Lead (Total)	Zinc (Total)
	Nickel (Total)	

The composite samples collected during all other sampling months are to be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Chromium (Total)	Copper (Total)	Zinc (Total)
	Nickel (Total)	

- b. On the same day that the composite samples listed in Section G(3)(a) above are being collected, the permittee shall collect a minimum of four (4) grab samples at equidistant time intervals over the entire operating day from the sample port on the discharge line from the second stage of the pH adjustment system, Sample Location #1 (i.e., one (1) grab sample collected every two (2) hours over an eight (8) hour operating day). Each grab sample must be preserved immediately upon sample collection in accordance with EPA regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If residual chlorine is present in the sample, then 0.6 grams of ascorbic acid must be added. The sample should then be retested for chlorine residual, and if it is present, the addition of ascorbic acid should be repeated. Once residual chlorine has been eliminated from the sample, the pH of the sample must be checked and elevated to greater than 12.0 standard units by the addition of sodium hydroxide, if necessary. Once the grab sample has been preserved to a pH greater than 12.0 standard units and no chlorine residual is detected, it may be composited with the other grab samples collected on that operating day. The composite of preserved grab samples must be refrigerated until analysis and must be analyzed within fourteen (14) days of collection for **Total Cyanide**.

4. During the months of April and October, until the expiration date of this permit, the permittee must collect a grab sample from the anti-rust solution tank (Tank 56), Sample Location #2, once the solution is depleted and just prior to discharge. This grab sample must be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Copper (Total)	Lead (Total)	Zinc (Total)
	Nickel (Total)	

If the tank is not discharged during the required sampling month, the permittee must notify the NBC in writing and sample during the next discharge of the tank. The discharge from this tank must be in compliance with the NBC concentrated discharge formula, referenced in Article 2 of the NBC Rules and Regulations.

5. Prior to batch discharging the contents of the cooling tower, a grab sample of the cooling tower wastewater must be collected from the sample port on the discharge pipe of the cooling tower, Sample Location #3. The grab sample must be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Chromium (Total)	Copper (Total)	Zinc (Total)
	Nickel (Total)	

Analytical results must be sent to the NBC with a properly completed Self-Monitoring Compliance Report and chain of custody documentation requesting permission to discharge the contents of the cooling tower. The permittee may only batch discharge the contents of the cooling tower once approval is received from the NBC.

Table 2 attached hereto summarizes the sampling requirements for this facility.

6. All water meters measuring flows, which ultimately discharge to the sampling locations specified previously, are to be read at the start of sampling and at the end of sampling. These readings and the resultant total flow are to be submitted with the sampling results.
7. The analytical results for each sampling month listed above must be received by the NBC within thirty (30) days after the end of the month in which the samples are to be collected. All sampling and analyses are to be done in accordance with EPA approved procedures (40 CFR §403 and 40 CFR §136). The permittee must complete and submit a Self-Monitoring Compliance Report (copy enclosed) with each certified laboratory analysis sheet. The laboratory analysis report must indicate the EPA approved test procedure for each parameter listed. All Self-Monitoring Compliance Reports must be signed by the permittee or authorized agent and certify that the information submitted is accurate and complete to the best of their knowledge.
8. The permittee must compare the analytical report results with the NBC's effluent discharge limitations listed in Table 1. If there are any violations of the NBC's standards, the permittee must notify the NBC within twenty-four (24) hours of becoming aware of the violation by contacting pretreatment staff at 461-8848 or by using the twenty-four (24) hour violation notification FAX form and must resample and analyze for the parameter(s) in violation of the NBC's standards, excluding BOD, TSS and pH. The resampling results must be received by the NBC no later than thirty (30) days following the date that the permittee became aware of the initial violation of the standards.
9. The NBC may, at any time, require more frequent monitoring than specified in this permit. Conditions that may result in the imposition of more frequent monitoring include, but are not limited to, the following:
  - a. Failure to meet effluent limitations;
  - b. Change in production processes;
  - c. Expansion or reduction of production;
  - d. Change in water usage;
  - e. Discovery of additional information on monitoring or production unavailable to the NBC at the time this permit was prepared.

## **H. Record Keeping Requirements:**

1. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the operation of the pretreatment system including, but not limited to, the following:
  - a. Amount of chemicals used on a monthly basis to provide pretreatment;
  - b. Amount of sludge generated on a monthly basis;
  - c. Completed manifest forms for hazardous materials;
  - d. A listing of all batch discharges including the date of the discharge and a description of the tank from which the discharge occurred;
  - e. The amount of chemicals added to provide pretreatment of batch discharges;
  - f. pH readings taken during the course of providing batch treatment of any process wastewater and the amount of sludge generated, where applicable;
  - g. Maintenance performed on the pretreatment system including weekly probe cleaning, monthly probe calibration, and other maintenance requests specified by inspectors of the NBC.
2. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the boiler operation including, but not limited to, the following:
  - a. A listing of each boiler facility blowdown visual inspection documenting the date, time, person conducting the blowdown and the appearance of the blowdown. This procedure ensures that a prohibited material is not discharged;
  - b. A listing of the date of each fuel tank filling.
3. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

## **I. Spill and Slug Prevention Control Plan:**

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

## **J. Toxic Organic/Solvent Management Plan:**

The permittee must ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

## **K. Emergency/Routine Notification Requirements:**

### 1. Emergency Notification of Accidental/Incidental Discharge

**In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR §403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 222-6781.** Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

### 2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:



- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

### 3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. pH monitoring equipment failure;
- b. pH probe failure;
- c. pH chart recorder failure;
- d. Chemical feed pump failure;
- e. Pretreatment system pump, filter, or mixer failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

### **L. Right of Entry:**

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

### **M. Permit Fee:**

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

## **N. Authorization To Do Business:**

The permittee is a limited liability company. The permittee shall ensure the limited liability company be registered with the Rhode Island Secretary of State Corporations Division. Surface Coatings Division, MFB LLC shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Surface Coatings Division, MFB LLC has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Surface Coatings Division, MFB LLC is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-permittee or any individual exercising ownership of Surface Coatings Division, MFB LLC shall be subject to the terms and conditions of the permit as if named herein.

## **O. Closing, Selling, Moving the Business:**

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

## **P. Transfer of Permit Prohibited:**

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

## **Q. Permit Violations:**

### 1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

**R. Revocation/Suspension of Permit:**

1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:
  - a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
  - b. Failure to report changes in operations or wastewater constituents;
  - c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;
  - d. Failure to adhere to an approved compliance schedule;
  - e. Failure to comply with administrative orders or settlement agreements;
  - f. Failure to pay authorized fees and user charges;
  - g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

### **S. Civil and Criminal Liability:**

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

### **T. Duty to Comply:**

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

### **U. Removed Substances:**

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

## **V. Permit Modification/Renewal:**

1. This permit may be modified for various reasons, including but not limited to the following:
  - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
  - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
  - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;
  - e. Violation of any terms or conditions of the permit;
  - f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
  - g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
  - h. To correct typographical or other errors in the permit;
  - i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;
  - j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

## **W. Integration:**

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

## **X. Jurisdiction:**

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

IEJ:NJD:smb

Attachments:

- Self Monitoring Compliance Report Form
- Continuous pH Monitoring Report Form
- Designation of Authorized Agent Form
- RCRA Handbook
- Twenty-four (24) Hour Violation Notification Fax Form
- List of Licensed Laboratories
- List of Toxic Organic Compounds

**Table 1**

**NBC Effluent Discharge Limitations**  
**Field's Point District**

<b><u>Parameter</u></b>	<b><u>Limitation (Max)</u></b>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300.00*
Total Suspended Solids (TSS)	300.00*
Total Oil and Grease (fats, oils and grease)	125.0
Oil and Grease (mineral origin)	25.0
Oil and Grease (animal/vegetable origin)	100.0
pH range (at all times)	5.0 - 11.0 s.u.

<b><u>Parameter</u></b>	<b>Daily Maximum Composite for 1 day (mg/l)</b>	<b>Average 10 day (mg/l)</b>
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.71
Copper (Total)	1.20	1.20
Cyanide (Total)	0.58	0.58
Lead (Total)	0.60	0.40
Mercury (Total)	0.005	0.005
Nickel (Total)	1.62	1.62
Silver (Total)	0.43	0.24
Zinc (Total)	2.61	1.48

All limitations are in units of mg/l unless otherwise specified.

\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.

**Table 2**

**Surface Coatings Division, MFB LLC**  
**Sampling Requirements**

	<b>Sample Location #1</b>		<b>Sample Location #2</b>	
	<b>Sample Port on the Discharge Line from the Second Stage of the pH Adjustment System</b>		<b>Sample Port on the Anti-Rust Solution Tank (Tank 56)</b>	
<b>Month</b>	<b>Composite Sample</b>		<b>Grab Sample</b>	
January				
February	X	Cr, Cu, Ni, Zn		
March				
April	X	Cd, Cr, Cu, CN, Pb, Ni, Ag, Zn	X	Cr, Cu, Ni, Zn
May				
June	X	Cr, Cu, Ni, Zn		
July				
August	X	Cr, Cu, Ni, Zn		
September				
October	X	Cd, Cr, Cu, CN, Pb, Ni, Ag, Zn	X	Cr, Cu, Ni, Zn
November				
December	X	Cr, Cu, Ni, Zn		

**Legend**

Cd - Cadmium      Pb - Lead  
Cr - Chromium     Ni - Nickel  
Cu - Copper        Ag - Silver  
CN - Cyanide       Zn - Zinc



# CERTIFICATE TO DISCHARGE

the following types of process water:

**TREATED METAL FINISHING WASTEWATERS**

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Surface Coatings Division, MFB LLC

26 Plymouth Street

Providence, RI 02907

**PERMIT NUMBER:** P1106-341-1216

**PERMIT EXPIRATION DATE:** 12/31/2016

The discharge permit must be kept at the above address for inspection. Failure to comply with the rules and regulations of the Narragansett Bay Commission or with the conditions of the discharge permit will subject the permittee to fines of up to \$25,000 per violation per R.I.G.L. 46-25-25.3.

December 16, 2011  
Initial Date of Issuance

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager

***TYPICAL PHARMACEUTICAL  
WASTEWATER DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: B1404-014-0417  
Company Name: **TEDOR PHARMA, INC.**  
Facility Address: 400 Highland Corporate Drive, Cumberland, RI 02864  
Mailing Address: 400 Highland Corporate Drive, Cumberland, RI 02864  
Facility President: Mr. Theodore Iorio  
Facility Authorized Agents: Robert F. Ferrari, P.E., Mr. Matthew Iorio  
User Classification: Pharmaceutical Manufacturer  
Categorical Standards Applicable: 40 CFR §439.47, Pretreatment Standards for New Sources

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Mr. Theodore Iorio and Tedor Pharma, Inc.**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 23 pages with conditions A - V.

**This permit is effective on May 1, 2012  
and expires on April 30, 2017.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission:**

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager  
Narragansett Bay Commission

April 27, 2012  
Date

**NOTE:** The NBC will accept the person(s) named on this permit as the **Permittee's** authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the **Permittee's** by-laws or per a vote of the directors if the **Permittee** is a corporation; a general partner or proprietor if the **Permittee** is a partnership or sole proprietorship respectively; or a duly authorized representative of an individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the **Permittee**. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

# CONDITIONS TO PERMIT

## **A. Effluent Discharge Limitations:**

1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 17, attached hereto and incorporated herein.
2. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
3. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
4. The permittee is classified as a pharmaceutical manufacturing firm and therefore must at all times comply with EPA Categorical Regulations 40 CFR §439.47, Subpart D, Pretreatment Standards for New Sources. EPA regulations require pharmaceutical manufacturers to maintain full compliance with the maximum daily discharge limit of 20.7 mg/L and the monthly average of 8.2 mg/L for acetone, n-amyl acetate, ethyl acetate, and isopropyl acetate. Subpart D of the pharmaceutical regulations also requires categorical pharmaceutical manufacturers to maintain full compliance with the maximum daily discharge limit of 3.0 mg/L and the monthly average limit of 0.7 mg/L for methylene chloride. Table 2 summarizes these Pretreatment Standards. NBC discharge limits for the Bucklin Point Treatment Facility do not exist for n-amyl acetate, ethyl acetate, and isopropyl acetate. The categorical limits are therefore in effect for these parameters. Methylene chloride and acetone are included in the NBC's list of Total Toxic Organics and must meet the more stringent local limit of 2.13 mg/L. NBC discharge limits for all other parameters in this permit are more stringent than the EPA's categorical limitations. Therefore, NBC local limits will be applied and enforced for all other parameters.

## **B. Permitted Discharges:**

1. The permittee is authorized to discharge the following tanks, solutions, or process wastewater streams to the NBC's facilities:
  - a. Treated Washwater from Pharmaceutical Manufacturing Equipment;
  - b. Wastewater from Pharmaceutical Research Operations;
  - c. Glass Washing Wastewater;
  - d. Laboratory Equipment, Floor, and Wall Washwater.

2. The permittee may discharge laboratory chemicals/solutions and washings from laboratory glassware, as identified in Section B(1)(b and c) above, provided that:
  - a. The chemicals/solutions are discharged on an as generated basis;
  - b. The discharge criteria listed in Table 1 are met at the source without dilution;
  - c. The chemical solutions are not and do not contain Toxic Pollutants (reference Table 4) in concentrations that would violate the NBC discharge limitations specified in Table 1 of this Permit;
  - d. The chemicals/solutions are not and do not contain mutagens, teratogens and/or carcinogens.
3. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

### **C. Prohibitions:**

1. The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
  - a. Product Solutions;
  - b. Raw Materials;
  - c. Off-Specification Product;
  - d. Cyanide Solutions;
  - e. Acidic Solutions with a pH less than 5.0 standard units;
  - f. Caustic Solutions with a pH greater than 11.0 standard units;
  - g. Degreasing Solutions;
  - h. Solvents;
  - i. Sludges;
  - j. Fuel or Lubricating Oils.
2. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) and Section B(2) of this permit or wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 17 and in Table 2 on page 18, attached hereto and incorporated herein.
3. The permittee may only treat and/or discharge those solutions that were indicated as such on plans received by the NBC from the permittee on May 7, 2003, July 14, 2005, and October 25, 2007. The permittee is strictly prohibited from discharging any other tanks, solutions, chemicals, or materials, including all prohibited substances as defined in the Rules and Regulations of the Narragansett Bay Commission, without written approval from the NBC.

4. The permittee is strictly prohibited from using portable pumps and/or flexible hose to transfer solutions directly to the pretreatment system or to bypass the pretreatment system and/or discharge solutions directly to the sewer without written approval from the NBC.
5. Non-sanitary discharges other than those specified in Section B of this permit are prohibited unless specifically approved by the NBC in writing.
6. Discharging of chemicals or solutions containing materials listed in the attached List of Toxic Pollutants (Table 4) is strictly prohibited if said discharge would result in violation of NBC limitations in Table 1.
7. The permittee is prohibited from discharging the following materials, solutions, and/or process wastewater streams to the NBC's facilities:
  - a. Isolation waste may not be discharged to the sewer;
  - b. Human body parts and tissues may not be discharged to the sewer system;
  - c. Discarded cultures and stocks of infectious agents and associated biologicals may not be discharged to the sewer.

Refer to Table 5 and Appendix I for isolation and oncological waste definitions.

#### **D. Pretreatment Requirements:**

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of one (1) sample location must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - Sample port on the discharge line of the Wastewater Storage Tank T-101, collecting all process discharges specified in Section B(1)(a) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Location #1 must be in compliance with the effluent limitations specified in Section A, Table 1, Table 2, and with the EPA Pharmaceutical Manufacturing Standards referenced in Section A(4) of this permit.

2. The permittee shall operate and maintain a pretreatment system in conformance with plans received by the NBC on May 7, 2003, July 14, 2005, and April 19, 2007. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.
3. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.

### **E. Monitoring Requirements:**

1. The permittee shall monitor the final pH, and volume of each treated batch discharge and shall record the data in the pretreatment system logbook referenced in Section F of this permit. The final pH, and volume of each batch discharge is to be reported to the NBC monthly on a summary report within thirty (30) days from the end of the month in which the data was recorded. (See sample copy enclosed).
2. During the months of January, April, July, and October, until the expiration date of this permit, the permittee shall conduct sampling of one batch discharge from the sample port on the discharge line of Wastewater Storage Tank T-101, Sample Location #1, after treatment and just prior to discharge. The permittee shall collect seven grab samples from the same batch discharge. The grab samples must be analyzed separately.
  - a. The first grab sample is to be collected in a glass container having a total volume greater than 20 ml. The grab sample must be preserved immediately upon sample collection in accordance with EPA Regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If the sample is known to contain residual chlorine, add sodium thiosulfate preservative (10 mg/40ml) to the empty sample bottles just prior to shipment to the sample site. If the sample is tested and residual chlorine is present then 0.008% by volume of sodium thiosulfate must be added (i.e., 2 mg per 25 ml of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate should be repeated. Once chlorine residual has been eliminated from the sample, the sample should be stored in the dark and refrigerated at a temperature of 0-4° C until analysis. No air bubbles may be present in any grab sample or that sample must be discarded. The grab sample is to be analyzed within fourteen (14) days of collection by EPA Method 1666 for the following **Volatile Organic Compounds** specific to the Pharmaceutical Manufacturing Industry:

n-Amyl acetate  
Ethyl acetate  
Isopropyl acetate



- b. The second grab sample is to be collected, preserved, and analyzed in accordance with analytical method number D3695, D4763, 524.2, or 1624 and with EPA protocols for the following parameter:

Acetone

- c. The third grab sample consisting of at least 1000ml (1L) is to be collected in a glass bottle with a Teflon lined cap with a volume of either 25 or 40 ml. The grab sample must be preserved immediately upon sample collection in accordance with EPA Regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If residual chlorine is present in the sample, then 0.008% by volume of sodium thiosulfate must be added (i.e. 2 mg per 25 ml of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate should be repeated. Once chlorine residual has been eliminated from the sample, the sample should be stored in the dark and refrigerated at a temperature of 0-4° C until analysis. No air bubbles may be present in the grab sample or that sample must be discarded. The grab sample is to be analyzed within three (3) days of collection for the **Volatile Organic Compounds (purgeables)** fraction of the Total Toxic Organics (TTO) list enclosed.
- d. The fourth grab sample consisting of at least 1000ml (1L) is to be collected for analysis in a glass amber bottle with a Teflon lined cap. The grab sample must be preserved immediately upon sample collection according to EPA Regulations. The sample must be tested for residual chlorine with potassium iodide paper. If chlorine residual is present in the sample, 0.008% by volume of sodium thiosulfate must be added (i.e. 80 mg per liter of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate shall be repeated. Once chlorine residual has been eliminated from the sample, the pH of the sample must be adjusted to between 6.0 and 9.0 standard units and the sample must be stored in the dark until analysis. The sample must be extracted within seven (7) days of collection and must be analyzed within forty (40) days of extraction for the **Acid, Base and Neutral fraction** of the Total Toxic Organics (TTO) list enclosed.
- e. The fifth grab sample is to be collected in a glass bottle. The sample must be collected and preserved according to EPA protocols and must be analyzed for the following parameter:

Total Oil and Grease (fats, oils, and grease)

- f. The sixth grab sample is to be collected, preserved, and analyzed according to EPA protocols for the following parameters:

Biochemical Oxygen Demand (BOD)  
Total Suspended Solids (TSS)

- g. The seventh grab sample is to be collected, preserved, and analyzed according to EPA protocols for the following parameters:

Cadmium (Total)

Copper (Total)

Zinc (Total)

If the tank is not discharged during the required sampling month, the permittee must notify the NBC in writing and sample during the next discharge of the tank.

Table 3 attached hereto summarizes the sampling requirements for this facility.

3. All water meters measuring flows, which ultimately discharge to the sampling locations specified previously, are to be read at the start of sampling and at the end of sampling. These readings and the resultant total flow are to be submitted with the sampling results.
4. The analytical results for each sampling month listed above must be received by the NBC within thirty (30) days after the end of the month in which the samples are to be collected. All sampling and analyses are to be done in accordance with EPA approved procedures (40 CFR §403 and 40 CFR §136). The permittee must complete and submit a Self-Monitoring Compliance Report (copy enclosed) with each certified laboratory analysis sheet including chain of custody documentation. The laboratory analysis report must indicate the EPA approved test procedure for each parameter listed. All Self-Monitoring Compliance Reports must be signed by the permittee or authorized agent and certify that the information submitted is accurate and complete to the best of their knowledge.
5. The permittee must compare the analytical report results with the NBC's effluent discharge limitations listed in Table 1. If there are any violations of the NBC's standards, the permittee must notify the NBC within twenty-four (24) hours of becoming aware of the violation by contacting pretreatment staff at 461-8848 or by using the twenty-four (24) hour violation notification FAX form and must resample and analyze for the parameter(s) in violation of the NBC's standards, excluding BOD, TSS and pH. The resampling results must be received by the NBC no later than thirty (30) days following the date that the permittee became aware of the initial violation of the standards.
6. The NBC may, at any time, require more frequent monitoring than specified in this permit. Conditions that may result in the imposition of more frequent monitoring include, but are not limited to, the following:
  - a. Failure to meet effluent limitations;
  - b. Change in production processes;
  - c. Expansion or reduction of production;
  - d. Change in water usage;
  - e. Discovery of additional information on monitoring or production unavailable to the NBC at the time this permit was prepared.

## **F. Record Keeping Requirements:**

1. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the operation of the pretreatment system including, but not limited to, the following:
  - a. Completed manifest forms for hazardous materials;
  - b. A listing of all batch discharges including the date of the discharge and a description of the tank from which the discharge occurred;
  - c. The amount of chemicals added to provide pretreatment of batch discharges;
  - d. pH readings taken during the course of providing batch treatment of any process wastewater and the amount of sludge generated, where applicable;
  - e. Maintenance performed on the pretreatment system including weekly probe cleaning, monthly probe calibration and other maintenance requests specified by inspectors of the NBC.
  
2. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

## **G. Spill and Slug Prevention Control Plan:**

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

## **H. Toxic Organic/Solvent Management Plan:**

The permittee must ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

## **I. Emergency/Routine Notification Requirements:**

### 1. Emergency Notification of Accidental/Incidental Discharge

**In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR 403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 434-6350.** Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

### 2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

### 3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. pH monitoring equipment failure;
- b. pH probe failure;
- c. Chemical feed pump failure;
- d. Pretreatment system pump, filter, or mixer failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

### **J. Right of Entry:**

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

### **K. Permit Fee:**

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

#### **L. Authorization To Do Business:**

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Tedor Pharma, Inc. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Tedor Pharma, Inc. has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Tedor Pharma, Inc. is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-permittee or any individual exercising ownership of Tedor Pharma, Inc. shall be subject to the terms and conditions of the permit as if named herein.

#### **M. Closing, Selling, Moving the Business:**

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

#### **N. Transfer of Permit Prohibited:**

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

#### **O. Permit Violations:**

##### 1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

##### 2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

**P. Revocation/Suspension of Permit:**

1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:
  - a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
  - b. Failure to report changes in operations or wastewater constituents;
  - c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;
  - d. Failure to adhere to an approved compliance schedule;
  - e. Failure to comply with administrative orders or settlement agreements;
  - f. Failure to pay authorized fees and user charges;
  - g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

**Q. Civil And Criminal Liability:**

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

**R. Duty To Comply:**

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

**S. Removed Substances:**

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.



## **T. Permit Modification/Renewal:**

1. This permit may be modified for various reasons, including but not limited to the following:
  - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
  - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
  - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;
  - e. Violation of any terms or conditions of the permit;
  - f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
  - g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
  - h. To correct typographical or other errors in the permit;
  - i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;
  - j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

## **U. Integration:**

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

## **V. Jurisdiction:**

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

IEJ:NJD:smb

Attachments:

- Self Monitoring Compliance Report Form
- Batch pH Monitoring Report Form
- Designation of Authorized Agent Form
- RCRA Handbook
- Twenty-four (24) Hour Violation Notification Fax Form
- List of Licensed Laboratories

**Table 1**

**NBC Effluent Discharge Limitations**  
**Bucklin Point District**

<b><u>Parameter</u></b>	<b><u>Limitation (Max)</u></b>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300.00*
Total Suspended Solids (TSS)	300.00*
Total Oil and Grease (fats, oils and grease)	125.0
Oil and Grease (mineral origin)	25.0
Oil and Grease (animal/vegetable origin)	100.0
pH range (at all times)	5.0 - 11.0 s.u.

<b><u>Parameter</u></b>	<b><u>Daily Maximum Concentration Limit (mg/l)</u></b>	<b><u>Monthly Average Concentration (mg/l)</u></b>
Arsenic (Total)	0.20	0.10
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.63
Copper (Total)	1.20	1.20
Cyanide (Total)	0.50	0.50
Lead (Total)	0.69	0.29
Mercury (Total)	0.06	0.03
Nickel (Total)	1.62	1.62
Selenium (Total)	0.40	0.20
Silver (Total)	0.40	0.20
Tin	4.00	2.00
Zinc (Total)	1.67	1.39

All limitations are in units of mg/l unless otherwise specified.

\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.

**Table 2**

**Tedor Pharma, Inc.**

**Pharmaceutical Manufacturing**  
**Pretreatment Standards for New Sources (PSNS)**  
**40 CFR §439.47**

<b>Subpart D</b>		
<b>PSNS for Mixing, Compounding, and Formulating Subcategory D</b>		
<b>Pollutant or Pollutant Property</b>	<b>Maximum for Any One Day (mg/L)</b>	<b>Maximum for Monthly Average (mg/L)</b>
n-Amyl acetate	20.7	8.2
Ethyl acetate	20.7	8.2
Isopropyl acetate	20.7	8.2
Acetone*	20.7	8.2
Methylene Chloride*	3.0	0.7

\* Must meet the combined total TTO discharge limit of 2.13 mg/l.

**Table 3**

**Tedor Pharma, Inc.**  
**Sampling Requirements**

<b>Sample Location #1</b>		
<b>Sample Port on the Discharge Line of Wastewater Storage Tank, T-101</b>		
<b>Month</b>	<b>Grab Sample*</b>	<b>Parameters</b>
January	X	Cd, Cu, Zn, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Acetone, Methylene Chloride, VOC, EXT, BOD, TSS
February		
March		
April	X	Cd, Cu, Zn, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Acetone, Methylene Chloride, VOC, EXT, BOD, TSS
May		
June		
July	X	Cd, Cu, Zn, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Acetone, Methylene Chloride, VOC, EXT, BOD, TSS
August		
September		
October	X	Cd, Cu, Zn, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Acetone, Methylene Chloride, VOC, EXT, BOD, TSS
November		
December		

**Legend**

Cd – Cadmium      Pb - Lead      BOD - Biochemical Oxygen Demand  
Cr – Chromium    Ni - Nickel     TSS - Total Suspended Solids  
Cu – Copper       Ag - Silver     TTO - Total Toxic Organic Compounds  
CN – Cyanide      Zn - Zinc       VOC - Volatile Organic Compounds Portion of TTO List  
EXT - Extractable Portion of TTO List

\*These grab samples are to be collected after treatment and just prior to discharge.

**Table 4**

**List of Toxic Pollutants**

The following list of Toxic Pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act.

<b>VOLATILES EPA METHOD 624</b>	<b>BASE/NEUTRAL - EPA METHOD 625</b>	<b>PESTICIDES - EPA METHOD 625</b>
acrolein	acenaphthene *	aldrin
acrylonitrile	acenaphthylene *	alpha-BHC
benzene	anthracene *	beta-BHC
bromoform	benzidine	gamma-BHC
carbon tetrachloride	benzo (a) anthracene *	delta-BHC
chlorobenzene	benzo (a) pyrene *	chlordane
chlorodibromomethane	3,4-benzofluoranthene *	4,4'-DDT
chloroethane	benzo (ghi) perylene *	4,4'-DDE
2-chloroethylvinyl ether	benzo (k) fluoranthene	4,4'-DDD
chloroform	bis (2-chloroethoxy) methane	dieldrin
dichlorobromomethane	bis (2-chloroethyl) ether	alpha-endosulfan
1,1-dichloroethane	bis (2-chloroisopropyl) ether	beta-endosulfan
1,2-dichloroethane	bis (2-ethylhexyl) phthalate	endosulfan sulfate
1,1-dichloroethylene	4-bromophenyl phenyl ether	endrin
1,2-dichloropropane	butylbenzyl phthalate	endrin aldelyde
1,3-dichloropropylene	2-chloronaphthalene	heptachlor
ethylbenzene	4-chlorophenyl phenyl ether	heptachlor epoxide
methyl bromide	chrysene *	PCB-1242
methyl chloride	dibenzo (a,h) anthracene *	PCB-1254
methylene chloride	1,2-dichlorobenzene	PCB-1221
1,1,2,2-tetrachloroethane	1,3-dichlorobenzene	PCB-1232
tetrachloroethylene	1,4-dichlorobenzene	PCB-1248
toluene	3,3'-dichlorobenzidine	PCB-1260
1,2-trans-dichloroethylene	diethyl phthalate	PCB-1016
1,1,1-trichloroethane	dimethyl phthalate	toxaphene
1,1,2-trichloroethane	di-n-butyl phthalate	
trichloroethylene	2,4-dinitrotoluene	
vinyl chloride	2,6-dinitrotoluene	
	di-n-octyl phthalate	
	1,2-diphenylhydrazine	
	(as asobenzene)	
	fluoranthene *	
	fluorene *	
	hexachlorobenzene	
	hexachlorobutadiene	
	hexachlorocyclopentadiene	
	hexachloroethane	
	indeno (1,2,3-cd) pyrene *	
	isophorone	
	naphthalene *	
	nitrobenzene	
	N-nitrodimethylamine	
	N-nitrosodi-n-propylamine	
	N-nitrosodiphenylamine	
	phenanthrene *	
	pyrene *	
	1,2,4-trichlorobenzene	
	* = Polynuclear Aromatic Hydrocarbons	
<b>ACID COMPOUNDS - EPA METHOD 625</b>		<b>OTHER TOXIC POLLUTANTS AND TOTAL PHENOL</b>
2-chlorophenol		Antimony, Total
2,4-dichlorophenol		Arsenic, Total
2,4-dimethylphenol		Beryllium, Total
4,6-dinitro-o-cresol		Cadmium, Total
2,4-dinitrophenol		Chromium, Total
2-nitrophenol		Chromium, Hexavalent
4-nitrophenol		Copper, Total
p-chloro-m-cresol		Lead, Total
pentachlorophenol		Mercury, Total
phenol		Nickel, Total
2,4,6-trichlorophenol		Selenium, Total
		Silver, Total
		Thallium, Total
		Zinc, Total
		Asbestos
		Cyanide, Total
		Phenols, Total
		TCDD (Dioxin)

## Table 5

### Definitions

1. **Biologicals** mean preparations made from living organisms and their products, including vaccines, cultures, etc., intended for used in diagnosing, immunizing or treating humans or animals or in research pertaining thereto.
2. **Blood Products** means any product derived from human blood, including but not limited to blood plasma, platelets, red or white blood corpuscles, and other derived licensed products, such as interferon, etc.
3. **Body Fluids** means liquid emanating or derived from humans and limited to blood; cerebrospinal, synovial, pleural, peritoneal and pericardial fluids; dialysate and amniotic fluids; and semen and vaginal secretions but excluding feces, urine, nasal secretions, sputum, sweat, tears, vomitus, saliva, and breast milk, unless any such excluded substance contains visible blood or is isolation waste.
4. **Contaminated Animal Carcasses, Body Parts and Bedding** - Body parts and bedding of animals that were exposed to infectious agents in research.
5. **Contaminated Sharps** - Discarded sharps (i.e. hypodermic needles, syringes, pasture pipettes, broken glass, scalpel blades, etc.) that may have come into contact with infectious agents.
6. **Contaminated Wastes from Surgical and Autopsy Procedures** - All soiled dressing, sponges, drapes, lavage tubes, surgical gloves, drainage sets, etc., that have come in contact with patient tissues, blood, body fluids, secretions, and excretions.
7. **Dialysis Unit Wastes** - Wastes that have come in contact with the blood of patients undergoing hemodialysis. Types of waste include contaminated disposal equipment and supplies such as tubing, filters, sheets, towels, gloves, etc.
8. **Discarded Cultures and Stocks of Infectious Agents and Associated Biologicals** - Cultures of specimens from medical/clinical and pathological laboratories, cultures and stocks of infectious agents, wastes from production of biologicals, discarded live and attenuated vaccines.
9. **Infectious Agent** - Any organism, such as a virus or a bacteria, that is capable of being communicated by invasion and multiplication in body tissues and capable of causing disease or adverse health impacts in humans.
10. **Isolation Wastes** - Biological waste and discarded materials contaminated with blood, excretion, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases. A list of these diseases may be found in Appendix I.
11. **Medical Waste** means any solid waste which is generated in the diagnosis, treatment, (i.e. provision of medical services), or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals.
12. **Oncological Waste** - Wastes discarded from the preparation and/or administration of those classes of drugs used in chemotherapy, i.e. antineoplastic and cytotoxic agents.
13. **Pathological Wastes** - Tissues and body parts, including body fluids removed during surgery and/or autopsy.
14. **Regulated Medical Waste** - A special category of solid waste that includes specific types of medical waste that includes solid, semisolid, or liquid materials, but does not include domestic sewage materials. This waste is subject to the handling and tracking requirements of RI DEM. Categories of regulated medical waste are defined below as blood products, body fluids, contaminated sharps, discarded cultures and stocks of infectious agents and associated biologicals, isolation wastes, pathological waste and oncological waste.

## Appendix I

### List of Diseases Associated with Isolation Wastes

- A. Biological waste and discarded materials contaminated with blood, excretion, exudates or secretions from humans who are isolated to protect others from certain highly communicable diseases.

The following viral diseases are included in the list of "highly communicable diseases" associated with the class of Isolation Wastes. Unless otherwise noted, these diseases have been taken from Classification 4 of the Center for Disease Control's (CDC) 1974 document "Classification of Etiologic Agents on the Basis of Hazard".

<u>Infectious Agent</u>	<u>Disease</u>
* Variola minor	Alastrim
* Variola major	Small Pox
* Whitepox	
* Monkey Pox	Human Monkeypox
** Crimean (congo) hemorrhagic fever virus	Crimean hemorrhagic fever
** Junin virus	Argentine hemorrhagic fever
** Machupo virus	Bolivian hemorrhagic fever
Herpesvirus simiae (Monkey B)	Oncogenic in primates
Lassa virus	Lassa fever
Marburg virus	Marburg virus disease
Russian spring-summer Encephalitis virus	Russian spring-summer Encephalitis
Kyasanur forest disease virus	Kyasanur forest disease
Omsk hemorrhagic fever virus	Omsk hemorrhagic fever
Central European encephalitis	Central European encephalitis
* Venezuelan equine encephalitis virus	Venezuelan equine encephalitis
* Yellow fever virus	Yellow fever
*** Ebola virus	Ebola virus disease
*** Absettarov virus	Tick-borne encephalitis
*** Hanzalova virus	Tick-borne encephalitis
*** Hyper virus	Tick-borne encephalitis
*** Kumlinge virus	Tick-borne encephalitis

\* When used for transmission or animal inoculation experiments.

\*\* CDC has noted that the above listed viruses in the hemorrhagic fever group and other viruses in this group, that are not yet identified, are also classified as Class 4.

\*\*\* CDC/NIH have included these diseases in Class 4 of their 1988 document "Biosafety in Microbiological and Biomedical laboratories". This document is an update of the 1974 publication.



B. Isolated animals known to be infected with highly communicable diseases.

The following diseases are included in the list of "highly communicable diseases" associated with animals. Unless otherwise noted by an asterisk, these diseases are part of the National Notifiable Disease Surveillances System List:

- Anthrax
- Botulism
- Brucellosis
- Eastern Equine Encephalitis
- Leptospirosis
- Lyme Disease
- Plague
- Psittacosis (Chlamyudiosis)
- Rabies
- Salmonellosis
- Trichinosis
- Tuberculosis
- Tularemia
- \* Cat-Scratch Fever Disease
- \* Ebola Virus
- \* Ehrlichia Canis
- \*\* Encephalomyocarditis
- \* Monkey B-Virus
- \* Monkey Marburg Virus
- \* Poxvirus
- \* "Q" fever
- \* Rocky Mountain Spotted Fever
- \* Vesicular Stomatitis

# CERTIFICATE TO DISCHARGE

the following types of process water:

**PHARMACEUTICAL RESEARCH AND MANUFACTURING WASTEWATER**

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Tedor Pharma, Inc.

400 Highland Corporate Drive

Cumberland, RI 02864

**PERMIT NUMBER:** B1404-014-0417

**PERMIT EXPIRATION DATE:** 04/30/2017

The discharge permit must be kept at the above address for inspection. Failure to comply with the rules and regulations of the Narragansett Bay Commission or with the conditions of the discharge permit will subject the permittee to fines of up to \$25,000 per violation per R.I.G.L. 46-25-25.3.

April 27, 2012

Initial Date of Issuance

/s/ Kerry M. Britt

Kerry M. Britt, Pretreatment Manager

***TYPICAL METAL FORMER  
WASTEWATER DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: B1506-015-0413

Company Name: **TIFFANY AND COMPANY**

Facility Address: 300 Maple Ridge Drive, Cumberland, RI 02864

Mailing Address: 300 Maple Ridge Drive, Cumberland, RI 02864

Facility President: Mr. Michael Kowalski

Facility Authorized Agents: Mr. Thomas Ducharme, Mr. Gregory Gongaware, Mr. Christopher Lepore, Mr. P. Adrian Medrano

User Classification: Non-Ferrous Precious Metal Forming Operations

Categorical Standards Applicable: 40 CFR §471.45, Pretreatment Standards for New Sources

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Mr. Michael Kowalski and Tiffany and Company**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 19 pages with conditions A - W and Attachment A.

**This permit is effective upon receipt  
and expires on April 30, 2013.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission**:

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager  
Narragansett Bay Commission

May 4, 2010  
Date

**NOTE:** The NBC will accept the person(s) named on this permit as the **Permittee's** authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the **Permittee's** by-laws or per a vote of the directors if the **Permittee** is a corporation; a general partner or proprietor if the **Permittee** is a partnership or sole proprietorship respectively; or a duly authorized representative of an individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the **Permittee**. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

## CONDITIONS TO PERMIT

### **A. Effluent Discharge Limitations:**

1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 17, attached hereto and incorporated herein.
2. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
3. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
4. The permittee is classified as a non-ferrous precious metal former and, therefore, must at all times comply with EPA Categorical Regulations 40 CFR §471.45, Pretreatment Standards for New Sources. EPA regulations require that non-ferrous precious metal formers maintain production and flow data to ensure full compliance with categorical limitations for cadmium, copper, cyanide, and silver. Table 2 attached to the permit provides concentration based limits calculated from EPA production based limitations and facility production and flow data. The calculations are outlined in Attachment A. Since the EPA limitations in Table 2 are more stringent than the NBC limitations in Table 1, the EPA limitations will be enforced at the final discharge location. Local limitations will be enforced for all other parameters as categorical limitations do not apply.

### **B. Permitted Discharges:**

1. The permittee is authorized to discharge the following tanks, solutions, or process wastewater streams to the NBC's facilities:
  - a. Treated Pickling Rinsewaters;
  - b. Treated Ion Exchange Regenerant;
  - c. Treated Backwash from Filters;
  - d. Treated Investing Wastewaters;
  - e. Treated Divesting Wastewaters;

- f. Treated Sanding and Grinding Area Floor Spills;
  - g. Treated Wastewater Treatment Room Floor Spills;
  - h. Treated Hand Wash Sink Wastewaters;
  - i. Treated Annealing Quench Contact Cooling Water;
  - j. Treated Shot Casting Contact Cooling Water;
  - k. Non-Contact Cooling Water;
  - l. Air Compressor Condensate.
2. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

### **C. Prohibitions:**

1. The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
- a. Concentrated Pickling Solutions;
  - b. Mass Finishing Wastewaters;
  - c. Soak Cleaner Solutions;
  - d. Soak Cleaner Rinsewaters;
  - e. Ultrasonic Cleaner Solutions;
  - f. Ultrasonic Cleaner Rinsewaters;
  - g. Wet Air Scrubber Wastewater;
  - h. Casting Department Chiller Unit Solutions;
  - i. Wet Grinding/Sanding Wastewaters;
  - j. Filtered Polishing Wastewaters;
  - k. Cooling Tower Discharges;
  - l. Bengal Water Jet Wastewater;
  - m. Electroplating Solutions;
  - n. Isopropyl Alcohol;
  - o. Isopropyl Alcohol-Castor Oil Solutions;
  - p. Cyanide Solutions;
  - q. Acidic Solutions with a pH less than 5.0 standard units (s.u.);
  - r. Caustic Solutions with a pH greater than 11.0 s.u.;
  - s. Degreasing Solutions;
  - t. Solvents;
  - u. Sludges;
  - v. Fuel or Lubricating Oils.
2. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) of this permit or wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 17, attached hereto and incorporated herein.

3. The permittee may only treat and/or discharge those solutions that were indicated as such on plans received by the NBC on August 15, 2000, June 2, 2003, January 29, 2004, November 8, 2004, May 14, 2008, October 20, 2009, and March 25, 2010. The permittee is strictly prohibited from discharging any other tanks, solutions, chemicals, or materials, including all prohibited substances as defined in the Rules and Regulations of the Narragansett Bay Commission, without written approval from the NBC.
4. The permittee is strictly prohibited from using portable pumps and/or flexible hose to transfer solutions directly to the pretreatment system or to bypass the pretreatment system and/or discharge solutions directly to the sewer without written approval from the NBC.

#### **D. Pretreatment Requirements:**

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of two (2) sample locations must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - Sample port on the discharge line of the final pH adjustment tank, collecting all process discharges specified in Section B(1) (a through j) of this permit.

Sample Location #2 - Sample port on the discharge line of the oil/water separator, collecting all process discharges specified in Section B(1)(1) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Locations #1 and #2 must be in compliance with the effluent limitations specified in Section A and Table 1 of this permit. The discharge through Sample Location #1 must be in compliance with the EPA Non-Ferrous Precious Metal Former Standards referenced in Section A(4) and Table 2 of this permit.

2. The permittee shall operate and maintain a pretreatment system in conformance with plans received by the NBC on April 24, 2002, January 24, 2004, and October 19, 2006. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.
3. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.



## **E. Zero Discharge/Recycle Operation Requirements:**

1. The permittee shall operate a Zero Process Discharge Wastewater Recycle Pretreatment System as proposed in the plans that have been received by the NBC on January 14, 2004, January 29, 2004, October 12, 2004, November 8, 2004, October 19, 2006, March 16, 2006, March 18, 2008, July 10, 2009, August 31, 2009, March 23, 2010, April 26, 2012, June 18, 2012 and July 12, 2012. This pretreatment system shall be used specifically for the purpose of recycling wastewater or eliminating discharges from the following operations:
  - a. Ultrasonic Cleaning Rinsing Operations;
  - b. Soak Cleaner Rinsewaters;
  - c. Mass Finishing Wastewaters;
  - d. Casting Department Chiller Units;
  - e. Wet Grinding/Sanding Operations;
  - f. Filtered Polishing Operations;
  - g. Polishing Department Cleaning Lines;
  - h. Bengal Water Jet Operations;
  - i. Isopropyl Alcohol Recycling Operations.
2. The permittee shall make no changes to the process tanks or pretreatment system without first submitting plans to the NBC for approval. Only those solutions indicated as being discharged to the treatment system on the plans received by the NBC on January 14, 2004, January 29, 2004, October 12, 2004, November 8, 2004, October 19, 2006, March 16, 2006, March 18, 2008, July 10, 2009, August 31, 2009, March 23, 2010, April 26, 2012, June 18, 2012 and July 12, 2012 may be treated on-site in the pretreatment equipment.
3. If any problems with the evaporation and/or recycle systems arise, or if the permittee would like to connect to the sewer for the purpose of discharging any process wastewater streams referenced in Section E(1) above, the permittee must notify the NBC, in writing, and obtain written approval from the NBC before resuming discharge or making any physical changes to the pretreatment evaporation and/or recycle systems, or associated piping.
4. The permittee shall cap off and seal all sewer drain lines in the facility associated with the process operations identified in Section E(1) above and no process wastewater from these operations may be discharged to the sewer through sanitary or any other sewer connection.
5. The permittee shall post signs at all sanitary sewer connections stating the following: "Discharge of Chemicals Prohibited by Rhode Island Law".
6. Failure to notify NBC personnel prior to resuming process wastewater discharges to the sewer from the process operations listed in Section E(1) above may be considered an intentional violation of the NBC's Rules and Regulations and may subject the permittee to civil and/or criminal penalties as defined in R.I.G.L. §46-25-25.2 and §46-25-25.3.

**F. Monitoring Requirements:**

1. The permittee shall monitor the pH of the effluent discharge and record it continuously. The permittee shall report the results monthly in a summary report giving the maximum, minimum and average pH readings for each day of operation (see sample copy enclosed). The data must be reported directly from the recording chart to an accuracy of 0.1 standard units. The permittee must submit the pH Monitoring Report within thirty (30) days from the end of the month in which the data is recorded. The original recording chart must be maintained on site for a period of at least three (3) years.
2. The permittee shall conduct sampling over one (1) full normal operating day during the months of February, April, June, August, October, and December until the expiration date of this permit.
  - a. A composite sample is to be collected which must consist of equal volume grab samples collected at least every half hour over the operating day or collected continuously with a composite sampler. The samples are to be collected from the sample port on the discharge line of the final pH adjustment tank, Sample Location #1. The composite samples collected in April and October are to be preserved and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total)	Lead (Total)	Silver (Total)
Chromium (Total)	Nickel (Total)	Zinc (Total)
Copper (Total)		

The composite samples collected during all other sampling months are to be preserved and analyzed in accordance with EPA protocols for the following parameters:

Copper (Total)	Silver (Total)
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- b. During the months of April and October, on the same day that the composite samples listed in Section F(2)(a) above are being collected, the permittee shall collect a minimum of four (4) grab samples at equidistant time intervals over the entire operating day from the sample port on the discharge line of the final pH adjustment tank, Sample Location #1 (i.e., one (1) grab sample collected every two (2) hours over an eight (8) hour operating day). Each grab sample must be preserved immediately upon sample collection in accordance with EPA regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If residual chlorine is present in the sample, then 0.6 grams of ascorbic acid must be added. The sample should then be retested for chlorine residual, and if it is present, the addition of ascorbic acid should be repeated. Once residual chlorine has been eliminated from the sample, the pH of the sample must

be checked and elevated to greater than 12.0 standard units by the addition of sodium hydroxide, if necessary. Once the grab sample has been preserved to a pH greater than 12.0 standard units and no chlorine residual is detected, it may be composited with the other grab samples collected on that operating day. The composite of preserved grab samples must be refrigerated until analysis and must be analyzed within fourteen (14) days of collection for **Total Cyanide**.

3. During the month of October, until the expiration date of this permit, the permittee shall collect one (1) grab sample from the sample port on the discharge line of the oil/water separator in the Mechanical Room, Sample Location #2. The grab sample for each month is to be collected in a glass bottle and must be preserved and analyzed in accordance with EPA protocols for the following parameter:

Total Oil and Grease (fats, oils, and grease)

Table 3 attached hereto summarizes the sampling requirements for this facility.

4. All water meters measuring flows, which ultimately discharge to the sampling locations specified previously, are to be read at the start of sampling and at the end of sampling. These readings and the resultant total flow are to be submitted with the sampling results.
5. A copy of the analytical results for each sampling month listed above must be received by the NBC within thirty (30) days after the end of the month in which the samples are to be collected. All sampling and analyses are to be done in accordance with EPA approved procedures (40 CFR §403 and 40 CFR §136). The permittee must complete and submit a Self-Monitoring Compliance Report (copy enclosed) with each certified laboratory analysis sheet including chain of custody documentation. The laboratory analysis report must indicate the EPA approved test procedure for each parameter listed. All Self-Monitoring Compliance Reports must be signed by the permittee or authorized agent and certify that the information submitted is accurate and complete to the best of their knowledge.
6. The permittee must compare the analytical report results with the NBC's effluent discharge limitations listed in Table 1. If there are any violations of the NBC's standards, the permittee must notify the NBC within twenty-four (24) hours of becoming aware of the violation by contacting pretreatment staff at 461-8848 or by using the twenty-four (24) hour violation notification FAX form and must resample and analyze for the parameter(s) in violation of the NBC's standards, excluding BOD, TSS and pH. The resampling results must be received by the NBC no later than thirty (30) days following the date that the permittee became aware of the initial violation of the standards.

7. The NBC may, at any time, require more frequent monitoring than specified in this permit. Conditions that may result in the imposition of more frequent monitoring include, but are not limited to, the following:
  - a. Failure to meet effluent limitations;
  - b. Change in production processes;
  - c. Expansion or reduction of production;
  - d. Change in water usage;
  - e. Discovery of additional information on monitoring or production unavailable to the NBC at the time this permit was prepared.

**G. Record Keeping Requirements:**

1. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the operation of the pretreatment system including, but not limited to, the following:
  - a. Amount of chemicals used on a monthly basis to provide pretreatment;
  - b. Amount of sludge generated on a monthly basis;
  - c. Completed manifest forms for hazardous materials;
  - d. Maintenance performed on the pretreatment system including weekly probe cleaning, monthly probe calibration and other maintenance requests specified by inspectors of the NBC.
2. The permittee shall be responsible for maintaining production and flow data for all categorical processes, as defined in 40 CFR §471.45 which discharge to the sewer. These records must be maintained at the facility and be available at all times for NBC review. The permittee shall report the production and flow data monthly to the NBC within thirty (30) days from the end of the month in which the data is recorded.
3. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

## **H. Spill and Slug Prevention Control Plan:**

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

## **I. Toxic Organic/Solvent Management Plan:**

The permittee must maintain an approved Toxic Organic/Solvent Management Plan to ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

## **J. Emergency/Routine Notification Requirements:**

### 1. Emergency Notification of Accidental/Incidental Discharge

**In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR §403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 434-6350. Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.**

### 2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

### 3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. pH monitoring equipment failure;
- b. pH probe failure;
- c. pH chart recorder failure;
- d. Chemical feed pump failure;
- e. Pretreatment system pump, filter, or mixer failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

## **K. Right of Entry:**

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

**L. Permit Fee:**

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G. L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

**M. Authorization To Do Business:**

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Tiffany and Company shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Tiffany and Company has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Tiffany and Company is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-permittee or any individual exercising ownership of Tiffany Corporation shall be subject to the terms and conditions of the permit as if named herein.

**N. Closing, Selling, Moving the Business:**

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

**O. Transfer of Permit Prohibited:**

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

## **P. Permit Violations:**

### 1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

### 2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

### 3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

### 4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

## **Q. Revocation/Suspension of Permit:**

### 1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:

- a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
- b. Failure to report changes in operations or wastewater constituents;
- c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;



- d. Failure to adhere to an approved compliance schedule;
- e. Failure to comply with administrative orders or settlement agreements;
- f. Failure to pay authorized fees and user charges;
- g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

## **R. Civil and Criminal Liability:**

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

## **S. Duty to Comply:**

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

## **T. Removed Substances:**

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

## **U. Permit Modification/Renewal:**

1. This permit may be modified for various reasons, including but not limited to the following:
  - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
  - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
  - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;
  - e. Violation of any terms or conditions of the permit;
  - f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
  - g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
  - h. To correct typographical or other errors in the permit;
  - i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;
  - j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

## **V. Integration:**

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

## **W. Jurisdiction:**

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

IEJ:NJD:smb

Attachments:

- Self Monitoring Compliance Report Form
- pH Monitoring Report Form
- Designation of Authorized Agent Form
- RCRA Handbook
- Twenty-Four (24) Hour Violation Notification Fax Form
- List of Licensed Laboratories
- List of Toxic Organic Compounds

**Table 1**

**NBC Effluent Discharge Limitations**  
**Bucklin Point District**

<b><u>Parameter</u></b>	<b><u>Limitation (Max)</u></b>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300.00*
Total Suspended Solids (TSS)	300.00*
Total Oil and Grease (Fats, Oils, and Grease)	125.0
Oil and Grease (mineral origin)	25.0
Oil and Grease (animal/vegetable origin)	100.0
pH range (at all times)	5.0 - 11.0 s.u.

<b><u>Parameter</u></b>	<b>Daily Maximum Concentration Limit (<u>mg/l</u>)</b>	<b>Monthly Average Concentration (<u>mg/l</u>)</b>
Arsenic (Total)	0.20	0.10
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.63
Copper (Total)	1.20	1.20
Cyanide (Total)	0.50	0.50
Lead (Total)	0.69	0.29
Mercury (Total)	0.06	0.03
Nickel (Total)	1.62	1.62
Selenium (Total)	0.40	0.20
Silver (Total)	0.40	0.20
Tin (Total)	4.00	2.00
Zinc (Total)	1.67	1.39

All limitations are in units of mg/l unless otherwise specified.

\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq

**Table 2**  
**Tiffany and Company**

**US EPA Effluent Discharge Limitations for**  
**Parameters with Categorical Standards**

<b>Parameter</b>	<b>Daily Max. (mg/L)</b>	<b>Monthly Average (mg/L)</b>
Cadmium (Total)*	0.07	0.04
Copper (Total)*	0.73	0.71
Cyanide (Total)*	0.30	0.29
Silver (Total)*	0.24	0.12

EPA discharge limits are based upon average production and flow data for the facility and the Non-Ferrous Precious Metal Forming Pretreatment Standards for New Sources 40 CFR §471.45. See Attachment A of this permit for more details.

\*The US EPA Discharge Limitations are more stringent than NBC Effluent Discharge Limitations listed in Table 1. Permittee will be periodically reviewed and discharge limitations may change as production and water usage change.

**Table 3**

**Tiffany and Company**  
**Sampling Requirements**

Month	Sample Location #1 Sample Port on the Discharge Line of the Final pH Adjustment Tank		Sample Location #2 Sample Port on the Discharge Line of the Oil/Water Separator in the Mechanical Room	
	Composite Sample	Parameters	Grab Sample	Parameters
January				
February	X	Cu, Ag		
March				
April	X	Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN		
May				
June	X	Cu, Ag		
July				
August	X	Cu, Ag		
September				
October	X	Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN	X	O&G
November				
December	X	Cu, Ag		

**Legend**

Cd - Cadmium      Pb - Lead      O & G - Total Oil and Grease (fats, oils, and grease)  
Cr - Chromium    Ni - Nickel  
Cu - Copper        Ag - Silver  
CN - Cyanide      Zn - Zinc

**Attachment A**

**Tiffany and Company**  
**Basis for EPA Discharge Limitations**

**Production Based Standards**

Subpart D PSNS for Surface Treatment Rinse		
Pollutant or Pollutant Property	Maximum for Any One (1) Day	Maximum for Monthly Average
	mg/off-kg (pounds per million off-pounds) of precious metals surface treated	
Cadmium	0.21	0.093
Copper	1.17	0.616
Cyanide	0.179	0.074
Silver	0.253	0.105

Subpart D PSNS for Heat Treatment Contact Cooling Water		
Pollutant or Pollutant Property	Maximum for Any One (1) Day	Maximum for Monthly Average
	mg/off-kg (pounds per million off-pounds) of precious metals surface treated	
Cadmium	0.142	0.063
Copper	0.793	0.417
Cyanide	0.121	0.050
Silver	0.171	0.071

Subpart D PSNS for Shot Casting Contact Cooling Water		
Pollutant or Pollutant Property	Maximum for Any One (1) Day	Maximum for Monthly Average
	mg/off-kg (pounds per million off-pounds) of precious metals surface treated	
Cadmium	0.125	0.055
Copper	0.698	0.367
Cyanide	0.107	0.044
Silver	0.151	0.0631

**Attachment A**  
**(continued)**

**Tiffany and Company**  
**Basis for EPA Discharge Limitations**

**Combined Wastestream Formula (CWF)**

**Alternative Mass Limit Formula**

$$M_{cwf} = (\Sigma M_i) * ((F_t - F_d) / (\Sigma F_i))$$

$M_{cwf}$  = alternate mass limit for pollutant

$M_i$  = categorical pretreatment standard mass limit for pollutant in stream i

$F_i$  = average daily flow of stream i (minimum 30 day average)

$F_d$  = average daily flow of dilute wastestream (minimum 30 day average)

$F_t$  = average daily flow through the combined treatment facility (minimum 30 day average)

**Conversion to mg/l ( $C_{mg/l}$ )**

$$C_{mg/l} = M_{cwf} / F$$

F = Average monthly flow through this combined treatment facility



# CERTIFICATE TO DISCHARGE

the following types of process water:

**TREATED NON-FERROUS PRECIOUS METAL FORMING WASTEWATER**

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Tiffany and Company

300 Maple Ridge Drive

Cumberland, RI 02964

**PERMIT NUMBER:** B1506-015-0413

**PERMIT EXPIRATION DATE:** 04/30/2013

The discharge permit must be kept at the above address for inspection. Failure to comply with the rules and regulations of the Narragansett Bay Commission or with the conditions of the discharge permit will subject the permittee to fines of up to \$25,000 per violation per R.I.G.L. 46-25-25.3.

May 4, 2010  
Initial Date of Issuance

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager

***TYPICAL STEAM ELECTRIC POWER  
GENERATOR WASTEWATER  
DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: B1604-006-0417

Company Name: **PAWTUCKET POWER ASSOCIATES, L.P.**

Facility Address: 181 Concord Street, Pawtucket, RI 02860

Mailing Address: 181 Concord Street, Pawtucket, RI 02860

Facility Vice-President of Operations: Mr. Jamie Urquhart

Facility Authorized Agents: Mr. Michael Baier, Mr. Edward G. Quinn

User Classification: Steam Electric Power Generation

Categorical Standards Applicable: 40 CFR §423.17, Pretreatment Standards for New Sources

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Mr. Jamie Urquhart and Pawtucket Power Associates, L.P.**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 20 pages with conditions A - X and Attachment A.

**This permit is effective on May 1, 2012  
and expires on April 30, 2017.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission:**

Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager  
Narragansett Bay Commission

April 27, 2012  
Date

**NOTE:** The NBC will accept the person(s) named on this permit as the **Permittee's** authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the **Permittee's** by-laws or per a vote of the directors if the **Permittee** is a corporation; a general partner or proprietor if the **Permittee** is a partnership or sole proprietorship respectively; or a duly authorized representative of an individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the **Permittee**. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

## **CONDITIONS TO PERMIT**

## **A. Effluent Discharge Limitations:**

1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 18, attached hereto and incorporated herein.
2. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
3. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
4. The permittee is classified as a Steam Electric Power Generator and, therefore must at all times comply with EPA Categorical Regulations 40 CFR §423.17, Pretreatment Standards for New Sources. EPA regulations require that Steam Electric Power Generators maintain full compliance with the EPA Total Copper maximum limit of 1.0 ppm for chemical metal cleaning wastes. In addition, EPA regulations require that the 126 pollutants listed in Table 2 of this permit shall not be discharged in any detectable amount in cooling tower blowdown as a result of cooling tower chemical additives, with exception to Total Chromium and Total Zinc. Cooling tower wastestreams contaminated with Chromium or Zinc as a result of chemical additives must be in full compliance with the EPA Total Chromium maximum limit of 0.2 ppm and the EPA Total Zinc maximum limit of 1.0 ppm for all cooling tower blowdown discharges. To demonstrate compliance with this requirement, the permittee may conduct an engineering study to verify that the chemicals added to the cooling tower will not result in the 126 pollutants listed in Table 2 of this permit being detectable in the cooling tower blowdown. If the engineering study is submitted and determined to be acceptable to the NBC, then the NBC local discharge limitations specified in Table 1 would become more stringent and the permittee must then maintain full compliance with these limits.
5. EPA Categorical Standards require that 126 Pollutants listed in Table 2 of this permit shall not be discharged in any detectable amount in the cooling tower blowdown as the result of cooling tower chemicals added. In lieu of monitoring, the permittee must submit an engineering study by May 30, 2012 demonstrating that the chemicals added to the cooling tower will not result in the 126 pollutants listed in Table 2 of this permit being detectable in the cooling tower blowdown. Therefore the permittee must maintain full compliance with the NBC local limits specified in Table 1 of this permit which are more stringent.

## **B. Permitted Discharges:**

1. The permittee is authorized to discharge the following tanks, solutions, or process wastewater streams to the NBC's facilities:
  - a. Treated Regenerant from Demineralization Equipment;
  - b. Heat Recovery Steam Generator Blowdown;
  - c. Equipment Washdown;
  - d. Floor Washdown;
  - e. Carbon Filter Backwash;
  - f. Cooling Tower Discharges.
2. The permittee may continuously purge up to 60,000 gallons per day of cooling tower wastewater to the NBC's facilities provided that the discharge criteria referenced in Section A(4) are met at all times.
3. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

## **C. Prohibitions:**

1. The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
  - a. Polychlorinated Biphenyl Compounds (PCB);
  - b. Fly Ash Transport Wastewaters;
  - c. Chemical Metal Cleaning Wastewater;
  - d. Acidic Solutions with a pH less than 5.0 standard units;
  - e. Caustic Solutions with a pH greater than 11.0 standard units;
  - f. Degreasing Solutions;
  - g. Solvents;
  - h. Sludges;
  - i. Fuel or Lubricating Oils.
2. The permittee is prohibited from batch discharging the entire contents of the cooling tower or greater than 60,000 gallons per day of cooling tower wastewater without first obtaining approval from the NBC. In order to obtain approval, the contents of the cooling tower must be sampled in accordance with Section G(6) of this permit.
3. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) of this permit or wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 18, attached hereto and incorporated herein.

4. The permittee may only treat and/or discharge those solutions that were indicated as such on plans received by the NBC from the permittee on December 28, 1995. The permittee is strictly prohibited from discharging any other tanks, solutions, chemicals, or materials, including all prohibited substances as defined in the Rules and Regulations of the Narragansett Bay Commission, without written approval from the NBC.
5. The permittee is strictly prohibited from using portable pumps and/or flexible hose to transfer solutions directly to the pretreatment system or to bypass the pretreatment system and/or discharge solutions directly to the sewer without written approval from the NBC.

#### **D. Pretreatment Requirements:**

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of four (4) sample locations must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - Sample port on the effluent discharge pipe of the oil/water separator, collecting all process discharges specified in Section B(1)(b, c and d) of this permit.

Sample Location #2 - Final pH adjustment tank sample port, collecting all process discharges specified in Section B(1)(a) of this permit.

Sample Location #3 - Sample port on the effluent discharge pipe of the carbon filter backwash line, collecting all process discharges specified in Section B(1)(e) of this permit.

Sample Location #4 - Sample port on the discharge pipe of the cooling tower, collecting all process discharges specified in Section B(1)(f) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Locations #1, #2, #3, and #4 must be in compliance with the effluent limitations specified in Section A and Table 1 of this permit. The discharge through Sample Location #4 must be in compliance with the EPA Steam Electric Power Generating Standards referenced in Sections A(4) and A(5) of the permit.

2. The permittee shall operate and maintain a pretreatment system in conformance with plans received by the NBC on February 14, 1994, October 27, 1995, and December 18, 1995. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.

3. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.

#### **E. Boiler Facility Requirements:**

1. The permittee shall maintain permanent seals on all floor drains and any other process wastewater and sewer discharge connections within the boiler facility, so as to prevent an incidental or accidental discharge from the boiler room.
2. The permittee has permanently sealed all open floor drains within oil storage tank vaults or located under buried tanks which connect to the sewer. The drains must remain sealed so as to prevent an incidental or accidental discharge.
3. The permittee shall oversee each oil tank filling to ensure fuel oil does not spill from the fill, overflow or vent locations and discharge to the sewer. Each tank filling operation must be documented in the logbook required in Section H(2) of this permit.
4. The permittee is strictly prohibited from discharging spilled oil contained in the boiler facility, fuel storage area(s), etc. into the sewer. Spilled oil must be collected for proper off-site disposal. The permittee must take appropriate measures as described above and any others necessary to ensure a spill will not discharge to the sewer system.

#### **F. Cooling Tower Blowdown Requirements:**

1. The permittee shall submit written certification monthly stating that the permittee has made no changes to the chemicals or dosage of chemicals routinely added to the cooling tower, as documented to the NBC in the engineering study referenced in Section A of this permit, during the previous one (1) month period. This certification must be made on the form designated Cooling Tower Chemical Certification, Attachment A.
2. Whenever the permittee changes the cooling tower chemicals, or alters the dosage of cooling tower chemicals added to the cooling tower, the permittee must conduct an engineering study to determine if the chemicals added to the cooling tower will cause detectable amounts in the cooling tower blowdown of the 126 pollutants listed in Table 2 of this permit.



**G. Monitoring Requirements:**

1. The permittee shall monitor the pH of the effluent discharge through Sample Locations #1 and #2 and record it continuously. The permittee shall report the results monthly in a summary report for each location giving the maximum, minimum and average pH readings for each day of operation (see sample copy enclosed). The data must be reported directly from the recording chart to an accuracy of 0.1 standard units. The pH Monitoring Reports must be received by the NBC within thirty (30) days from the end of the month in which the data is recorded. The original recording charts must be maintained on site for a period of at least three (3) years.
2. The permittee shall conduct sampling over one (1) full normal operating day during the months of January, April, July, and October, until the expiration date of this permit.
  - a. A composite sample is to be collected which must consist of equal volume grab samples collected at least every half hour over the operating day or collected continuously with a composite sampler. The samples are to be collected from the sample port on the effluent discharge pipe of the oil/water separator, Sample Location #1. The composite samples are to be collected, preserved and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total)	Copper (Total)	Nickel (Total)
Chromium (Total)	Lead (Total)	Zinc (Total)

- b. On the same day that the composite sampling listed in Section F(2)(a) is being conducted, the permittee shall collect four (4) grab samples from the sample port on the effluent discharge pipe of the oil/water separator, Sample Location #1. The grab samples must be collected in glass bottles, preserved and analyzed separately in accordance with EPA protocols for the following parameter:

Total Oil and Grease (fats, oils and grease)

The mathematical average of the four grab samples will be used to determine compliance with the NBC discharge limitation for Total Oil and Grease (fats, oils, and grease).

3. During the months of January, April, July, and October, until the expiration date of the permit, the permittee shall collect one (1) grab sample from the final pH adjustment tank sample port, Sample Location #2. The grab sample must be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total)	Copper (Total)	Nickel (Total)
Chromium (Total)	Lead (Total)	Zinc (Total)

If the tank is not discharged during the required sampling month, the permittee must notify the NBC in writing and sample during the next discharge of the tank.

- During the months of January, April, July, and October, until the expiration date of the permit, the permittee shall collect one (1) grab sample from the ample port on the effluent discharge pipe of the carbon filter backwash line, Sample Location #3. The grab sample must be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total)	Copper (Total)	Nickel (Total)
Chromium (Total)	Lead (Total)	Zinc (Total)

If no discharges occur from backwashing operations during the required sampling month, the permittee must notify the NBC in writing and sample during the next backwash event.

- The permittee shall conduct sampling of the cooling tower over one full operating day during the months of January, April, July, and October, until the expiration date of the permit. A composite sample is to be collected which must consist of equal volume grab samples collected at least every half hour over the operating day or collected continuously with a composite sampler. The samples are to be collected from the sample port on the discharge pipe of the cooling tower, Sample Location #4. The composite samples are to be collected, preserved and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total)	Copper (Total)	Nickel (Total)
Chromium (Total)	Lead (Total)	Zinc (Total)

If the cooling tower is not discharged during the required sampling month, the permittee must notify the NBC in writing and sample during the next discharge of the cooling tower.

- Prior to batch discharging the contents of the cooling tower or greater than 60,000 gallons per day of cooling tower wastewater, the permittee must collect one (1) grab sample from the sample port on the discharge pipe of the cooling tower, Sample Location #4. The grab sample must be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total)	Copper (Total)	Nickel (Total)
Chromium (Total)	Lead (Total)	Zinc (Total)

Analytical results must be submitted to the NBC with a properly completed Self-Monitoring Compliance Report and chain of custody documentation requesting permission to discharge the contents of the cooling tower. The permittee may only batch discharge the contents of the cooling tower once approval is received from the NBC.

Table 3 attached hereto summarizes the sampling requirements for this facility.

- All water meters measuring flows, which ultimately discharge to the sampling locations specified previously, are to be read at the start of sampling and at the end of sampling. These readings and the resultant total flow are to be submitted with the sampling results.

8. The analytical results for each sampling month listed above must be received by the NBC within thirty (30) days after the end of the month in which the samples are to be taken. All sampling and analyses are to be done in accordance with EPA approved procedures (40 CFR §403 and 40 CFR §136). The permittee must complete and submit a Self-Monitoring Compliance Report (copy enclosed) with each certified laboratory analysis sheet including chain of custody documentation. The laboratory analysis report must indicate the EPA approved test procedure for each parameter listed. All Self-Monitoring Compliance Reports must be signed by the permittee or authorized agent and certify that the information submitted is accurate and complete to the best of their knowledge.
9. The permittee must compare the analytical report results with the NBC's effluent discharge limitations listed in Table 1. If there are any violations of the NBC's standards, the permittee must notify the NBC within twenty-four (24) hours of becoming aware of the violation by contacting pretreatment staff at 461-8848 or by using the twenty-four (24) hour violation notification FAX form and must resample and analyze for the parameter(s) in violation of the NBC's standards, excluding BOD, TSS and pH. The resampling results must be submitted to the NBC no later than thirty (30) days following the date that the permittee became aware of the initial violation of the standards.
10. The NBC may, at any time, require more frequent monitoring than specified in this permit. Conditions that may result in the imposition of more frequent monitoring include, but are not limited to, the following:
  - a. Failure to meet effluent limitations;
  - b. Change in production processes;
  - c. Expansion or reduction of production;
  - d. Change in water usage;
  - e. Discovery of additional information on monitoring or production unavailable to the NBC at the time this permit was prepared.

## **H. Record Keeping Requirements:**

1. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the operation of the pretreatment system including, but not limited to, the following:
  - a. Amount of chemicals used on a monthly basis to provide pretreatment;
  - b. Amount of sludge generated on a monthly basis;
  - c. Completed manifest forms for hazardous materials;
  - d. A listing of all batch discharges including the date of the discharge and a description of the tank from which the discharge occurred;
  - e. The amount of chemicals added to provide pretreatment of batch discharges;
  - f. Maintenance performed on the pretreatment system including weekly probe cleaning, monthly probe calibration and other maintenance requests specified by inspectors of the NBC.

2. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the boiler operation including, but not limited to, the following:

A listing of the date of each fuel tank filling

3. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

### **I. Spill and Slug Prevention Control Plan:**

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

### **J. Toxic Organic/Solvent Management Plan:**

The permittee must ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

### **K. Emergency/Routine Notification Requirements:**

1. Emergency Notification of Accidental/Incidental Discharge

**In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR §403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 434-6350.** Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

2. Routine Notifications of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process

wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

### 3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. pH monitoring equipment failure;
- b. pH probe failure;
- c. pH chart recorder failure;
- d. Chemical feed pump failure;
- e. Pretreatment system pump, filter, or mixer failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

**L. Right of Entry:**

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

**M. Permit Fee:**

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

**N. Authorization To Do Business:**

The permittee is a limited partnership. The permittee shall ensure the limited partnership be registered with the Rhode Island Secretary of State Corporations Division. Pawtucket Power Associates, L.P. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Pawtucket Power Associates, L.P. has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Pawtucket Power Associates, L.P. is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-permittee or any individual exercising ownership of Pawtucket Power Associates, L.P. shall be subject to the terms and conditions of the permit as if named herein.

**O. Closing, Selling, Moving the Business:**

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

## **P. Transfer of Permit Prohibited:**

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

## **Q. Permit Violations:**

### 1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

### 2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

### 3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

### 4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

## **R. Revocation/Suspension of Permit:**

1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:
  - a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
  - b. Failure to report changes in operations or wastewater constituents;
  - c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;
  - d. Failure to adhere to an approved compliance schedule;
  - e. Failure to comply with administrative orders or settlement agreements;
  - f. Failure to pay authorized fees and user charges;
  - g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

## **S. Civil and Criminal Liability:**

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

## **T. Duty to Comply:**

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.



2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

#### **U. Removed Substances:**

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

#### **V. Permit Modification/Renewal:**

1. This permit may be modified for various reasons, including but not limited to the following:
  - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
  - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
  - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;
  - e. Violation of any terms or conditions of the permit;
  - f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
  - g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
  - h. To correct typographical or other errors in the permit;
  - i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;

- j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

### **W. Integration:**

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

### **X. Jurisdiction:**

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

IEJ:AB:smb

Attachments:

- Self Monitoring Compliance Report Form
- Continuous pH Monitoring Report Form
- Designation of Authorized Agent Form
- RCRA Handbook
- Twenty-four (24) Hour Violation Notification Fax Form
- List of Licensed Laboratories
- List of Toxic Organic Compounds

**Table 1**  
**NBC Effluent Discharge Limitations**  
**Bucklin Point District**

<b><u>Parameter</u></b>	<b><u>Limitation (Max)</u></b>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300.00*
Total Suspended Solids (TSS)	300.00*
Total Oil and Grease (Fats, Oils, and Grease)	125.0
Oil and Grease (mineral origin)	25.0
Oil and Grease (animal/vegetable origin)	100.0
pH range (at all times)	5.0 - 11.0 s.u.

<b><u>Parameter</u></b>	<b><u>Daily Maximum Concentration Limit (mg/l)</u></b>	<b><u>Monthly Average Concentration (mg/l)</u></b>
Arsenic (Total)	0.20	0.10
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.63
Copper (Total)	1.20	1.20
Cyanide (Total)	0.50	0.50
Lead (Total)	0.69	0.29
Mercury (Total)	0.06	0.03
Nickel (Total)	1.62	1.62
Selenium (Total)	0.40	0.20
Silver (Total)	0.40	0.20
Tin (Total)	4.00	2.00
Zinc (Total)	1.67	1.39

All limitations are in units of mg/l unless otherwise specified.

\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.

**Table 2**  
**List of 126 Priority Pollutants**  
**40 CFR §423.17 Appendix A**

<b>Volatiles</b>	<b>Base/Neutral</b>	<b>Pesticides</b>
Acrolein	Acenaphthene*	aldrin
Acrylonitrile	Acenaphthylene*	alpha – BHC
Benzene	Anthracene*	beta – BHC
Bromoform	Benzidine	gamma – BHC
carbon tetrachloride	benzo (a) anthracene*	delta – BHC
Chlorobenzene	benzo (a) pyrene*	chlordan
Chlorodibromomethane	3,4-benzofluoranthene*	4,4' – DDT
Chloroethane	benzo (ghi) perylene*	4,4' – DDE
2-chloroethylvinyl ether	benzo (k) fluoranthene	4,4' – DDD
Chloroform	Bis (2-chloroethoxy) methane	dieldrin
Dichlorobromomethane	Bis (2-chloroethyl) ether	alpha-endosulfan
1,1-dichloroethane	Bis (2-chloroisopropyl) ether	beta-endosulfan
1,2-dichloroethane	Bis (2-ethylhexyl) phthalate	endosulfan sulfate
1,1-dichloroethylene	4-bromophenyl phenyl ether	endrin
1,2-dichloropropane	butylbenzyl phthalate	endrin aldehyde
1,3-dichloropropylene	2-chloronaphthalene	heptachlor
Ethylbenzene	4-chlorophenyl phenyl ether	heptachlor epoxide
methyl bromide	Chrysene*	toxaphene
methyl chloride	dibenzo (a, h) anthracene*	
methylene chloride	1,2-dichlorobenzene	
1,1,2,2-tetrachloroethane	1,3-dichlorobenzene	<b>Polychlorinated Biphenyls</b>
Tetrachloroethylene	1,4-dichlorobenzene	PCB-1242
Toluene	3,3-dichlorobenzidine	PCB-1254
1,2-trans-dichloroethylene	diethyl phthalate	PCB-1221
1,1,1-trichloroethane	dimethyl phthalate	PCB-1232
1,1,2-trichloroethane	di-n-butyl phthalate	PCB-1248
Trichloroethylene	2,4-dinitrotoluene	PCB-1260
vinyl chloride	2,6-dinitrotoluene	PCB-1016
	di-n-octyl phthalate	
	1,2-diphenylhydrazine	<b>Other Toxic Pollutants and</b>
	(as azobenzene)	<b>Total Phenol</b>
	fluoranthene*	Antimony, Total
	fluorene*	Arsenic, Total
	hexachlorobenzene	Beryllium, Total
	hexachlorobutadiene	Cadmium, Total
	hexachlorocyclopentadiene	Chromium, Total
	hexachloroethane	Chromium, Hexavalent
	indeno (1,2,3-cd) pyrene*	Copper, Total
	isophorone	Lead, Total
	nitrobenzene	Mercury, Total
	n-nitrosodimethylamine	Nickel, Total
	n-nitrosodi-n-propylamine	Selenium, Total
	n-nitrosodiphenylamine	Silver, Total
	Phenanthrene*	Thallium, Total
	Pyrene*	Zinc, Total
	1,2,4-trichlorobenzene	Asbestos
	Naphthalene*	Cyanide, Total
		Phenols, Total
		TCDD (Dioxin)
	* = Polynuclear Aromatic Hydrocarbons	

**Table 3**

**Pawtucket Power Associates, L.P.**  
**Sampling Requirements**

Month	Sample Location #1 Sample Port on the Effluent Discharge Pipe of the Oil/Water Separator				Sample Location #2 Final pH Adjustment Tank Sample Port		Sample Location #3 Sample Port on the Effluent Discharge Pipe of the Carbon Filter Backwash Line		Sample Location #4 Sample Port on the Discharge Pipe of the Cooling Tower	
	Composite Sample	Parameters	Grab Sample*	Parameters	Grab Sample	Parameters	Grab Sample	Parameters	Composite Sample	Parameters
January	X	Cd, Cr, Cu, Ni, Pb, Zn	X	O & G	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn
February										
March										
April	X	Cd, Cr, Cu, Ni, Pb, Zn	X	O & G	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn
May										
June										
July	X	Cd, Cr, Cu, Ni, Pb, Zn	X	O & G	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn
August										
September										
October	X	Cd, Cr, Cu, Ni, Pb, Zn	X	O & G	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn
November										
December										

**Legend**

Cd - Cadmium      Pb - Lead      O & G – Total Oil and Grease (fats, oils, and grease)  
Cr - Chromium    Ni - Nickel  
Cu - Copper        Ag - Silver  
CN - Cyanide      Zn - Zinc

\*These grab samples are to be collected on the same day that the composite sample is collected. Each grab must be collected, preserved, and analyzed separately.

**Attachment A**

**Cooling Tower Chemical Certification**

For the Month of \_\_\_\_\_, 20\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RETURN TO:**  
Narragansett Bay Commission  
Pretreatment Program  
2 Ernest Street  
Providence, RI 02905-5502

I, \_\_\_\_\_, as authorized representative of \_\_\_\_\_, do hereby decree that the cooling tower chemicals used and the cooling tower chemical dosages were not altered in any way during the past month. I am aware that if the chemicals used or the additive dosages are altered, then an engineering study must be immediately conducted to demonstrate that the changes will not cause detectable amounts of the 126 priority pollutants in the cooling tower blowdown.

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for known violations.

\_\_\_\_\_  
Authorized Representative Signature

\_\_\_\_\_  
Date

# CERTIFICATE TO DISCHARGE

the following types of process water:

**STEAM ELECTRIC POWER GENERATING WASTEWATER**

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Pawtucket Power Associates, L.P.

181 Concord Street

Pawtucket, RI 02860

**PERMIT NUMBER:** B1604-006-0417

**PERMIT EXPIRATION DATE:** 04/30/2017

The discharge permit must be kept at the above address for inspection. Failure to comply with the rules and regulations of the Narragansett Bay Commission or with the conditions of the discharge permit will subject the permittee to fines of up to \$25,000 per violation per R.I.G.L. 46-25-25.3.

April 27, 2012

Initial Date of Issuance

/s/ Kerry M. Britt

Kerry M. Britt, Pretreatment Manager

***TYPICAL ZERO PROCESS  
WASTEWATER-SANITARY  
DISCHARGE PERMIT***





# ZERO PROCESS WASTEWATER - SANITARY DISCHARGE PERMIT

Permit Number: B4200-090-0117

Company Name: **BULLARD ABRASIVES, INC.**

Facility Address: 6 Carol Drive, Lincoln, RI 02865

Mailing Address: 6 Carol Drive, Lincoln, RI 02865

Facility President: Mr. Craig A. Pickell

Facility Authorized Agents: Mr. Craig A. Pickell, Mr. Hector Rodriguez

User Classification: Abrasive Manufacturing with Zero Discharge Machine Parts  
Cleaning Operations

Categorical Standards Applicable: None

In accordance with R.I.G.L. §46-25-1 et. seq. and the Rules and Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District, the Narragansett Bay Commission hereby grants a Zero Process Wastewater-Sanitary Discharge Permit to **Mr. Craig A. Pickell and Bullard Abrasives, Inc.**, hereinafter jointly referred to as **Permittee**. This permit authorizes the permittee to discharge only sanitary wastewater into the NBC's facilities in accordance with the terms and conditions of this permit. The discharge of any process wastewater streams to the NBC's sewer system shall constitute a violation of the permit. This permit consists of 13 pages with conditions A - T and Attachment A.

**This permit is effective on February 1, 2012  
and expires on January 31, 2017.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission:**

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager  
Narragansett Bay Commission

January 17, 2012  
Date

**Mr. Craig A. Pickell and Bullard Abrasives, Inc.** hereby consents to this Zero Process Wastewater-Sanitary Discharge Permit. In so consenting, appropriate officers of **Bullard Abrasives, Inc.** have personally read and understood each of the numbered provisions in this Zero Discharge Permit. This permit allows **Bullard Abrasives, Inc.** to continue to discharge sanitary wastewater into the Narragansett Bay Commission sewer system while operating a process wastewater recycle system on the premises.

A corporation organized under the laws of \_\_\_\_\_,  
composed of officers as follows:

<u>Please Type or Print</u>	<u>Signature</u>	
_____ President	_____	_____ Date
_____ Vice President	_____	_____ Date
_____ Secretary	_____	_____ Date
_____ Treasurer	_____	_____ Date

I have read and understood the NBC's Rules and Regulations and the conditions and procedures contained in this permit.

Company Authorized Agent(s) \_\_\_\_\_  
Title \_\_\_\_\_  
Signature \_\_\_\_\_

**Company  
Seal**

**NOTE:** The NBC will accept the person(s) named on page 2 of this permit as the company's authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the company's by-laws or per a vote of the directors if the company is a corporation; a general partner or proprietor if the company is a partnership or sole proprietorship respectively; or a duly authorized representative, the individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the company. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

## CONDITIONS TO PERMIT

### **A. Zero Process Discharge-Wastewater Recycle Pretreatment System Requirements:**

1. The permittee shall operate and maintain a Zero Process Discharge Wastewater System as proposed in the plans that have been received by the NBC on January 22, 2007. This pretreatment system shall be used specifically for the use of recycling wastewater or eliminating discharges from the following operations:

Machine Parts Cleaning Operations

2. The permittee shall make no changes to the process tanks or zero discharge system without first submitting plans to the NBC for approval. Only those solutions indicated as being discharged to the zero discharge system on the plans received by the NBC on January 22, 2007 may be treated on-site in the zero discharge equipment.
3. If any problems with the zero discharge system arise or if the permittee would like to connect to the sewer for the purpose of discharging any process wastewater streams, the permittee must notify the NBC, in writing, and obtain written approval from the NBC before resuming discharge or making any physical changes to process tanks, the zero discharge system, or associated piping.
4. The permittee shall cap off and seal all process wastewater sewer drain lines in the facility and no process wastewater may be discharged to the sewer through sanitary or any other sewer connection.
5. The permittee shall post signs at all sanitary sewer connections stating the following: "Discharge of Chemicals Prohibited by Rhode Island Law".
6. Failure to notify NBC personnel prior to resuming process wastewater discharges to the sewer may be considered an intentional violation of the NBC's Rules and Regulations.

### **B. Prohibitions:**

1. The permittee is strictly prohibited from discharging any type of process wastewater streams to the NBC sewer system including all prohibited substances as defined in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include but are not limited to the following:
  - a. Cooling Wastewaters;
  - b. Rinse Solutions;
  - c. Soap Cleaning Solutions;
  - d. Cyanide Solutions;
  - e. Acid/Alkaline Solutions;

- f. Vibratory/Tubbing Wastewaters;
  - g. Metal Cleaning Solutions;
  - h. Degreasing Solutions;
  - i. Solvents;
  - j. Sludges.
2. The permittee is strictly prohibited from discharging any process wastewater or sanitary wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 13, attached hereto and incorporated herein.
  3. The permittee shall not use portable pumps and flexible hoses within the facility for transfer of solutions without written authorization from the NBC.

### **C. Record Keeping Requirements:**

1. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the operation of the zero discharge system including, but not limited to, the following:
  - a. Completed manifest forms for hazardous materials;
  - b. Maintenance performed on the zero discharge system and other maintenance requests specified by inspectors of the NBC.
2. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

### **D. Certification of No Discharge:**

During the months of April and October, the permittee shall submit written certification biannually stating that the permittee has made no process wastewater discharges to the sewer during the previous six (6) month period. This certification must be received by the NBC within thirty (30) days from the end of the required reporting month. This certification must contain a biannual water meter reading and must be made on the form designated as Zero Process Wastewater Discharge Certification, Attachment A.

### **E. Spill and Slug Control Plans:**

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

### **F. Toxic Organic/Solvent Management Plan:**

The permittee must ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

### **G. Emergency/Routine Notification Requirements:**

#### 1. Emergency Notification of Accidental/Incidental Discharge

**In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR 403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 434-6350.** Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

#### 2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

#### **H. Right of Entry:**

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

#### **I. Permit Fee:**

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

#### **J. Authorization To Do Business:**

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Bullard Abrasives, Inc. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Bullard Abrasives, Inc. has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Bullard Abrasives, Inc. is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-

permittee or any individual exercising ownership of Bullard Abrasives, Inc. shall be subject to the terms and conditions of the permit as if named herein.

**K. Closing, Selling, Moving the Business:**

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to selling or ceasing business and/or disposing of any process waste associated with the move or the cessation of business.

**L. Transfer of Permit Prohibited:**

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

**M. Permit Violations:**

1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.



3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

**N. Revocation/Suspension of Permit:**

1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:

- a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
- b. Failure to report changes in operations or wastewater constituents;
- c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;
- d. Failure to adhere to an approved compliance schedule;
- e. Failure to comply with administrative orders or settlement agreements;
- f. Failure to pay authorized fees and user charges;
- g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

**O. Civil and Criminal Liability:**

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

**P. Duty To Comply:**

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

**Q. Removed Substances:**

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

**R. Permit Modification/Renewal:**

1. This permit may be modified for various reasons, including but not limited to the following:
  - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
  - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
  - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;

- e. Violation of any terms or conditions of the permit;
- f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
- g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
- h. To correct typographical or other errors in the permit;
- i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;
- j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

## **S. Integration:**

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

## **T. Jurisdiction:**

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

IEJ:AS:smb

### Attachments:

- Designation of Authorized Agent Form
- RCRA Handbook
- Toxic Organic/Solvent Management Plan
- Spill and Slug Prevention Control Plan
- Bi-Annual Zero Process Wastewater Discharge Certification

**Table 1**

**NBC Effluent Discharge Limitations**  
**Bucklin Point District**

<b><u>Parameter</u></b>	<b><u>Limitation (Max)</u></b>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300.00*
Total Suspended Solids (TSS)	300.00*
Total Oil and Grease (fats, oils and grease)	125.0
Oil and Grease (mineral origin)	25.0
Oil and Grease (animal/vegetable origin)	100.0
pH range (at all times)	5.0 - 11.0 s.u.

<b><u>Parameter</u></b>	<b><u>Daily Maximum Concentration Limit (mg/l)</u></b>	<b><u>Monthly Average Concentration (mg/l)</u></b>
Arsenic (Total)	0.20	0.10
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.63
Copper (Total)	1.20	1.20
Cyanide (Total)	0.50	0.50
Lead (Total)	0.69	0.29
Mercury (Total)	0.06	0.03
Nickel (Total)	1.62	1.62
Selenium (Total)	0.40	0.20
Silver (Total)	0.40	0.20
Tin (Total)	4.00	2.00
Zinc (Total)	1.67	1.39

All limitations are in units of mg/l unless otherwise specified.

\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.

**Attachment A**

**Zero Process Wastewater Discharge Certification**

For the Six (6) Month Period from

\_\_\_\_\_ to \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RETURN TO:**  
Narragansett Bay Commission  
Pretreatment Program  
2 Ernest Street  
Providence, RI 02905-5502

I, \_\_\_\_\_, as authorized representative of \_\_\_\_\_, do hereby decree that no process wastewater was discharged into the Narragansett Bay Commission sewer system for the past six (6) month period.

Date of Meter Readings: \_\_\_\_\_

<u>Meter Number</u>	<u>Water Meter Readings</u>	<u>Units (cf, gal.)</u>
Meter #1	_____	_____
Meter #2	_____	_____
Meter #3	_____	_____

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for known violations.

\_\_\_\_\_  
Authorized Representative Signature

\_\_\_\_\_  
Date

***TYPICAL SEPTAGE HAULER  
WASTEWATER DISCHARGE PERMIT***



## NARRAGANSETT BAY COMMISSION SEPTAGE DISCHARGE PERMIT

Permit Number: B8000-128-0417  
Company Name: **RHODE ISLAND SEPTIC SERVICES**  
Company President: Mr. Michael Sliney  
Facility Address: 315 Nooseneck Hill Road, Exeter, RI 02822  
Mailing Address: 315 Nooseneck Hill Road, Exeter, RI 02822  
DEM License Number: 376

In accordance with Title 46, Chapter 25 (Act) of Rhode Island General Laws and in accordance with the Rules and Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), the Narragansett Bay Commission (NBC) hereby authorizes **Mr. Michael Sliney and Rhode Island Septic Services**, hereinafter jointly referred to as **Permittee**, to discharge residential quality septage to the NBC Lincoln Septage Receiving Station. The Permittee must adhere to the terms, conditions, and procedures of this permit, the Rules and Regulations of the NBC, and all other applicable federal, state, and local regulations. Any changes to the information initially provided to the NBC by the Permittee in the permit application must immediately be reported to the NBC. This permit is not transferable without the written consent of the NBC. If the Permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

The permittee is authorized to discharge residential quality septage to the NBC Lincoln Septage Receiving Station from the vehicles listed in Attachment A of this permit. This permit consists of two pages with Conditions 1 through 15 and Septage Permit Attachment A.

The permittee shall at all times follow the procedures specified in Attachment A of this permit for adding new septage vehicles and for discharging at the NBC Lincoln Septage Receiving Station.

**This permit becomes effective on May 1, 2012  
and expires on April 30, 2017.**

Noncompliance with any terms or conditions of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by fines and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission**:

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager  
Narragansett Bay Commission

April 20, 2012  
Date



## CONDITIONS

All terms used herein unless otherwise indicated shall be construed as defined under Article 2 of the NBC Rules and Regulations.

**1. Location of Discharge:** Septage may be discharged only at the NBC Lincoln Septage Receiving Station or other authorized location as the Commission may designate.

**2. Origins of Septage:** Septage to be discharged to the Commission's facilities must originate from domestic sources within the geographic boundaries of the State of Rhode Island.

**3. Prohibitions:** The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. The discharge of grease or septage loads containing grease is strictly prohibited by this permit. Mixing or blending of grease with septage loads is strictly prohibited. The permittee is strictly responsible for ensuring that loads containing grease are not taken to the NBC Lincoln Septage Receiving Station or enforcement action may result against the permittee.

**4. Procedures for Discharging Septage:** The permittee agrees to adhere to the NBC Septage Discharge Procedures, as detailed in Septage Discharge Permit Attachment A.

**5. Permit Fee:** The permittee agrees to pay an annual permit fee if applicable and all other fees assessed by the Commission in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I. General Law 39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

**6. Records Retention:** Records which substantiate any information supplied in permit applications, load manifest forms and any other informational requirements of the Rules and Regulations, or any applicable state or federal law, are to be kept by the permittee for a period of three (3) years, unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of three (3) years following resolution of such litigation or dispute.

**7. Jurisdiction:** This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

**8. Integration:** This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of the NBC Rules and Regulations.

**9. Transfer of Permit Prohibited:** Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, or different vehicle without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said business referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property. The new owner must apply for and be issued a new permit before discharges will be allowed.

**10. Enforcement Costs:** The permittee agrees to reimburse the Commission for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a Court of competent jurisdiction.

**11. Damage to the Facilities:** The permittee agrees to indemnify and hold harmless the Commission from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the Commission and caused by discharges from the permittee, either singly or by interaction with other wastes. If, after the discharge, further analysis of the waste shows it to be in violation of the Commission's wastewater discharge limitations, the Commission may impose fines, pursuant to R.I. General Laws 46-25.

**12. Violation of the Commission's Permit:** The permittee agrees to reimburse the Commission for any penalty and additional operating expense incurred by the Commission for violations of the Commission's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes. Violations of this permit include but are not limited to the following: unauthorized discharge into Commission facilities, discharge without a load ticket or properly completed manifest form, failure to pay fees, and violation of any other applicable laws or regulations.

**13. Penalties for Violations:** Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

**14. Revocation of Permit:** Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, discharging or dumping grease, discharging septage into unauthorized locations, falsification of documents, including permit applications or manifest, etc.

**15. Duty to Comply/Civil and Criminal Liability:** The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements. Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

Septage Discharge Permit Number B8000-128-0417  
Attachment A  
Rhode Island Septic Services

**PERMITTED VEHICLES:**

VEHICLE TYPE	REGISTRATION NUMBER	TRUCK VIN NUMBER	CAPACITY (GALLONS)
TANK TRUCK	14521	IM2P26766VM033348	4793
TANK TRUCK	16601	IM2P267Y2PM014150	3896
TRAILER	6785	150B012	6916
TRACTOR	11805	2M2N187Y8JC024422	

Procedure for Adding Vehicle(s) to the Permit

1. The permittee must obtain appropriate registrations, insurance and DEM permits for the vehicle(s).
2. The permittee must make an appointment with the NBC Pretreatment personnel to determine the volume of the vehicle(s).
3. The volume of the vehicle is to be determined under NBC oversight as follows:
  - a. The empty vehicle is to be brought to the NBC treatment plant at a scheduled time to be inspected to ensure that it is empty.
  - b. The vehicle will then be weighed empty.
  - c. The vehicle will then be brought back to the NBC plant to be filled with plant water.
  - d. The vehicle will then be reweighed full.
  - e. The vehicle may discharge this water back at the NBC plant.  
The difference in weight will be used to determine the volume of the vehicle in gallons.
4. The permittee will be responsible to pay any costs associated with weighing the vehicle(s).
5. NBC personnel will affix a computer chip and volume sticker to the vehicle(s).
6. The Wastewater Discharge Permit will then be revised to include the additional vehicle(s).
7. The permittee may not discharge septage to the NBC receiving station from the new vehicle(s) until the revised permit is issued.

Septage Facility Discharge Procedures

1. The permittee must establish and maintain an account with a positive cash balance with the NBC Customer Service Section.
2. The permittee must ensure each vehicle permitted to discharge must have a computer chip, permitted vehicle decal and volume decal affixed to it.
3. The permittee must ensure the manifest form is completed in its entirety prior to proceeding to the septage facility and submitted to the NBC operator when the vehicle is checked in.
4. The permittee must ensure the volume of the vehicle meets NBC volume/time restrictions.
5. The NBC operator must scan the computer chip affixed to the vehicle.
6. Activate the gate and enter the facility.
7. Obtain a sample of the load from the discharge line of the vehicle.
8. The NBC operator will test the sample and may approve truck for discharge or may reject the load.
9. After NBC approval is granted, the permittee must connect the hose to the station receiving port and may begin discharge.
10. After the discharge is complete, disconnect the hose.
11. The permittee must wash any drippage and/or spillage into drains.
12. The permittee must exit the station.

***TYPICAL RESTAURANT  
WASTEWATER DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: P8502-415-0317

Company Name: **CASSARINO'S RESTAURANT**

Facility Address: 177 Atwells Avenue, Providence, RI 02903

Mailing Address: 177 Atwells Avenue, Providence, RI 02903

Facility President: Mr. Tyler Barron

Facility Authorized Agent: Mr. Steven Renzi

User Classification: Restaurant/Food Preparation Operations

Categorical Standards Applicable: None

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Mr. Tyler Barron and Cassarino's Restaurant**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 13 pages with conditions A - T.

**This permit becomes effective on April 1, 2012  
and expires on March 31, 2017.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission:**

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager  
Narragansett Bay Commission

March 20, 2012  
Date

**NOTE:** The NBC will accept the person(s) named on this permit as the **Permittee's** authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the **Permittee's** by-laws or per a vote of the directors if the **Permittee** is a corporation; a general partner or proprietor if the **Permittee** is a partnership or sole proprietorship respectively; or a duly authorized representative of an individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the **Permittee**. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

# CONDITIONS TO PERMIT

## **A. Effluent Discharge Limitations:**

1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 13, attached hereto and incorporated herein. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
2. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.

## **B. Permitted Discharges:**

1. The permittee is authorized to discharge the following waste, solutions or process wastewater streams to the NBC's facilities:
  - a. Treated Food Preparation Wastewater;
  - b. Treated Dish, Pot, and Equipment Washwater.
2. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

## **C. Prohibitions:**

1. The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
  - a. Fryolator/Cooking Oils and Grease;
  - b. Ground Food, Food Products, or Solid Kitchen Waste;
  - c. Degreasing Solutions;
  - d. Solvents;
  - e. Sludges;
  - f. Fuel or Lubricating Oils.
2. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) of this permit or wastestreams containing pollutants

with concentrations in excess of the effluent limitations specified in Table 1, attached hereto and incorporated herein.

3. The permittee is prohibited from discharging any solution or chemicals which might interfere with the proper operation of the automatic grease removal unit or may cause a violation of the NBC's Rules and Regulations.
4. The use of garbage grinders, food macerators, or other equipment used for the purpose of discharging solid waste to the sewer system is strictly prohibited.

#### **D. Pretreatment Requirements:**

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of one (1) sample location must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - Sample port on the discharge pipe from the automatic grease removal unit, collecting all process discharges specified in Section B(1)(a and b) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Location #1 must be in compliance with the effluent limitations specified in Section A and Table 1 of this permit.

2. The permittee has installed an automatic grease removal unit in conformance with the plans approved by the NBC on October 5, 2011. The grease removal unit shall be fully operational on a twenty-four (24) hour basis whenever kitchen operations are being conducted.
3. The permittee is responsible for operating and maintaining the automatic grease removal unit so that the effluent limitations are met at all times. The permittee shall also be responsible for maintaining all records pertaining to the operation of the grease removal unit, including but not limited to the following:
  - a. The automatic grease removal unit with all associated strainers must be inspected every workday to determine whether the system is functioning normally or in need of cleaning, grease disposal or any corrective measures;
  - b. A grease removal unit logbook must be maintained at the permittee's facility and must be located near the grease removal unit. The logbook must include such information as outlined under Section F, Record Keeping Requirements. The

logbook must be kept on the premises at all times and available to NBC personnel for their review;

- c. Only kitchen wastewater from pot sinks, wok stations, and dinnerware/utensil prerinsing operations may be discharged into the automatic grease removal unit. Sanitary waste, dishwasher wastewater and other wastewater may not be discharged to the grease removal unit.
4. The permittee must install additional grease removal equipment that conforms with Article 4.15 of the NBC Rules and Regulations if determined necessary by the NBC to ensure that effluent limitations are met at all times. Plans of the pretreatment system must be submitted to the NBC for approval before beginning construction, should installation of additional grease removal system be required.

### **E. Monitoring Requirements:**

No regularly scheduled wastewater monitoring reports are required of the permittee. The NBC may, at any time, change the monitoring requirements specified in this permit. Conditions that may result in the imposition of monitoring requirements include, but are not limited to, the following:

- a. Inspections or samplings performed by NBC personnel;
- b. An increase in the seating capacity of the facility;
- c. An increase in flow to the grease removal unit;
- d. Discovery of additional information unavailable to the NBC at the time this permit was prepared;
- e. Improper maintenance of a grease removal unit;
- f. Failure to meet the NBC effluent discharge limitations.

### **F. Record Keeping Requirements:**

1. The permittee must inspect and maintain the automatic grease removal unit at least once per day and record in a logbook the time and date (month, day, and year) of the inspection, each grease removal activity, and the name of the individual conducting the activity. Maintenance activities which must be documented in a logbook include the following:
  - a. Cleaning and emptying of the solids basket;
  - b. Cleaning of the wiper blades;
  - c. Cleaning of the trough;
  - d. The estimated amount of grease removed;
  - e. Wet vacuuming of the grease removal unit.
2. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable state or federal law are to be kept by the permittee for a



period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

## **G. Emergency/Routine Notification Requirements:**

### 1. Emergency Notification of Accidental/Incidental Discharge

The permittee must maintain all associated facilities to ensure that incidental and accidental spills are not able to enter the NBC sewer system. **In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR 403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 222-6781.** Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

### 2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system. Operational changes that may affect the quality or quantity of the process wastestream include, but are not limited to, the following:

- a. Restaurant expansion;
- b. Removal of equipment or installation of additional equipment;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- c. Change in restaurant menu;
- d. Change from the hours of facility operation specified in the discharge permit application;

- e. Changes in food preparation methods.

### 3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. Grease removal unit heating element failure;
- b. Grease removal unit timing unit failure;
- c. Grease removal unit wiper blade failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

## **H. Right of Entry:**

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

## **I. Permit Fee:**

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

**J. Authorization To Do Business:**

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Cassarino's Restaurant shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Cassarino's Restaurant has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Cassarino's Restaurant is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-permittee or any individual exercising ownership of Cassarino's Restaurant shall be subject to the terms and conditions of the permit as if named herein.

**K. Closing, Selling, Moving the Business:**

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to selling or ceasing business and/or disposing of any process waste associated with the move or the cessation of business.

**L. Transfer of Permit Prohibited:**

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

**M. Permit Violations:**

1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

**N. Revocation/Suspension of Permit:**

1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:

- a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
- b. Failure to report changes in operations or wastewater constituents;
- c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;
- d. Failure to adhere to an approved compliance schedule;
- e. Failure to comply with administrative orders or settlement agreements;
- f. Failure to pay authorized fees and user charges;
- g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

### **O. Civil And Criminal Liability:**

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

### **P. Duty To Comply:**

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

### **Q. Removed Substances:**

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

## **R. Permit Modification/Renewal:**

1. This permit may be modified for various reasons, including but not limited to the following:
  - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
  - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
  - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;
  - e. Violation of any terms or conditions of the permit;
  - f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
  - g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
  - h. To correct typographical or other errors in the permit;
  - i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;
  - j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

## **S. Integration:**

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

## **T. Jurisdiction:**

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

DD:AS:smb

Attachments:

Designation of Authorized Agent Form  
RCRA Handbook  
Automatic Grease Removal Unit Logsheet

**Table 1**

**NBC Effluent Discharge Limitations**  
**Field's Point District**

<b><u>Parameter</u></b>	<b><u>Limitation (Max)</u></b>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300.00*
Total Suspended Solids (TSS)	300.00*
Total Oil and Grease (fats, oils and grease)	125.0
Oil and Grease (mineral origin)	25.0
Oil and Grease (animal/vegetable origin)	100.0
pH range (at all times)	5.0 - 11.0 s.u.

<b><u>Parameter</u></b>	<b>Daily Maximum Composite for 1 day (<u>mg/l</u>)</b>	<b>Average 10 day (<u>mg/l</u>)</b>
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.71
Copper (Total)	1.20	1.20
Cyanide (Total)	0.58	0.58
Lead (Total)	0.60	0.40
Mercury (Total)	0.005	0.005
Nickel (Total)	1.62	1.62
Silver (Total)	0.43	0.24
Zinc (Total)	2.61	1.48

All limitations are in units of mg/l unless otherwise specified.

\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.



# CERTIFICATE TO DISCHARGE

the following types of process water:

**TREATED FOOD PREPARATION WASTEWATER,  
DISH, POT, AND EQUIPMENT WASHWATER**

---

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Cassarino's Restaurant

177 Atwells Avenue

Providence, RI 02903

**PERMIT NUMBER:** P8502-415-0317

**PERMIT EXPIRATION DATE:** 03/31/2017

The discharge permit must be kept at the above address for inspection. Failure to comply with the rules and regulations of the Narragansett Bay Commission or with the conditions of the discharge permit will subject the permittee to fines of up to \$25,000 per violation per R.I.G.L. 46-25-25.3.

March 20, 2012  
Initial Date of Issuance

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager

***TYPICAL DENTIST/X-RAY  
PROCESSING WASTEWATER  
DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: P9400-318-0617  
Company Name: **CHRISTINA D. DICOMES, DMD**  
Facility Address: 1557 Hartford Avenue, Johnston, RI 02919  
Mailing Address: 1557 Hartford Avenue, Johnston, RI 02919  
Facility President: Dr. Christina DiComes  
Facility Authorized Agent: Dr. Christina DiComes  
User Classification: Dental Operations  
Categorical Standards Applicable: None

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Dr. Christina DiComes and Christina D. DiComes, DMD**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 15 pages with conditions A - U and Attachment A.

**This permit is effective on July 1, 2012  
and expires on June 30, 2017.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission:**

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager  
Narragansett Bay Commission

June 22, 2012  
Date

**NOTE:** The NBC will accept the person(s) named on this permit as the **Permittee's** authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the **Permittee's** by-laws or per a vote of the directors if the **Permittee** is a corporation; a general partner or proprietor if the **Permittee** is a partnership or sole proprietorship respectively; or a duly authorized representative of an individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the **Permittee**. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

## CONDITIONS TO PERMIT

### **A. Effluent Discharge Limitations:**

1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 14, attached hereto and incorporated herein.
2. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
3. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
4. The permittee is classified as a dentist and therefore, must at all times comply with the NBC Best Management Practices for the Management of Waste Dental Amalgam.

### **B. Permitted Discharges:**

1. The permittee is authorized to discharge the following tanks, solutions or process wastewater streams to the NBC's facilities:
  - a. Treated Dental Wastewater Containing Amalgam;
  - b. Dental Process Wastewaters.
2. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

### **C. Prohibitions:**

1. The permittee is strictly prohibited from discharging any prohibited substances as detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
  - a. X-Ray Processing Rinsewater, Developer, and Fixer Solutions;
  - b. Dental Amalgam;
  - c. Elemental Mercury;
  - d. Untreated Dental Wastewater Containing Amalgam;

- e. Acidic Solutions with a pH less than 5.0 standard units;
  - f. Caustic Solutions with a pH greater than 11.0 standard units;
  - g. Solvents;
  - h. Sludges.
2. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) of this permit or wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 14, attached hereto and incorporated herein.
  3. Non-sanitary discharges other than those specified in Section B of this permit are prohibited unless specifically approved by the NBC in writing.
  4. No chemicals, oils, solutions and/or materials including solid substances such as towels, casts, etc. in quantities or of such size capable of causing obstruction to the flow in sewers may be discharged to the sewer unless specifically approved by the NBC in writing.
  5. Discharging of chemicals or solutions containing materials listed in the attached List of Toxic Pollutants (Table 2) is strictly prohibited if said discharge would result in violation of NBC limitations in Table 1.

**D. Pretreatment Requirements:**

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of one (1) sample location must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - Sample port on the discharge line of the amalgam separator, collecting all process discharges specified in Section B(1)(a and b) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Location #1 must be in compliance with the effluent limitations specified in Section A and Table 1 of this permit.

2. The permittee has installed and shall operate and maintain pretreatment system in conformance with plans submitted to the NBC on May 12, 2004. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.

3. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.
4. The permittee shall adhere to Option 1 and all mandatory best management practices of the NBC's Best Management Practices on the management of Waste Dental Amalgam.
5. In accordance with Option 1 of the NBC's Best Management Practice for the Management of Waste Dental Amalgam, the permittee shall install, operate and maintain an amalgam separator which is ISO 11143 certified to an efficiency of 99% removal in accordance with the plans submitted to the NBC on May 12, 2004. The amalgam separator shall be fully operational whenever discharges from dental procedures are occurring.
6. The permittee shall maintain the amalgam separator. Maintenance activities include but are not limited to the following:
  - a. The permittee must inspect the separator weekly to ensure proper operation;
  - b. The permittee must adhere to all manufacturers specifications for maintenance of the separator;
  - c. The maintenance activities must be documented in a logbook as required by Section G(2) of this permit.
7. The permittee shall maintain chair side traps on all dental chairs to capture large amalgam particles from cuspidors and vacuum systems. Chair side traps must be inspected daily and cleaned or replaced as necessary. Disposable traps or material from reusable traps must be placed in a labeled storage container. The permittee may only rinse a trap if necessary and only in a designated sink that is plumbed with appropriate flow restriction to an NBC approved amalgam separator.
8. The permittee shall ensure that all vacuum pumps are equipped with filters. The permittee shall replace the filter at least once per month or more frequently if necessary. Removed filters should be held over a spill tray to capture any accumulated water from the trap. The water should be carefully decanted without losing any visible amalgam. The decant water, if free of visible amalgam, may be discharged to the sewer through an NBC approved amalgam separator. Dry-turbine vacuums must be inspected to ensure there is no built up sludge in the air/water separator. Collected sludge must be disposed of properly as a mercury containing waste.
9. The permittee shall use a NBC approved cleaner for disinfection of amalgam and/or mercury contaminated vacuum lines, instruments or equipment. The use of bleach or bleach containing cleaners is strictly prohibited as methyl mercury may be evolved. Corrosive and oxidizing cleaners are also prohibited to ensure methyl mercury is not evolved.

10. The permittee has designated all sinks for sanitary use only. The permittee shall post signs at these sinks stating "Sanitary Use Only". Washing of equipment, instruments, filters, and capsules in these sinks is strictly prohibited.

### **E. Certification of Compliance with Best Management Practice:**

The permittee shall submit written annual certification of compliance with Best Management Practices for the Management of Waste Dental Amalgam for the period from November to October. The certification must be made on the form designated as Best Management Practice Certification, Attachment A, and must be received within thirty (30) days after the period for which the certification is being made.

### **F. Monitoring Requirements:**

No regularly scheduled wastewater monitoring reports are required of the permittee. The NBC may, at any time. Require monitoring. Conditions that may result in the imposition of monitoring include, but are not limited to, the following

- a. Failure to meet effluent limitations;
- b. Change in production processes;
- c. Expansion or reduction of production;
- d. Change in water usage;
- e. Discovery of additional information on monitoring or production unavailable to the NBC at the time this permit was prepared.

### **G. Record Keeping Requirements:**

1. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the amalgam separator including, but not limited to, the following:
  - a. Date (month, day and year) of each trap and separator inspection and service activity;
  - b. The location of each trap and separator being serviced;
  - c. All routine and non-routine activities conducted (i.e. cleaning, maintenance, filter replacement);
  - d. Signature of person conducting activity.
2. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.



## **H. Emergency/Routine Notification Requirements:**

### 1. Emergency Notification of Accidental/Incidental Discharge

The permittee must maintain all associated facilities to ensure that incidental and accidental spills are not able to enter the NBC sewer system. **In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR 403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 222-6781.** Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

### 2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

Amalgam Separator Failure

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

**I. Right of Entry:**

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

**J. Permit Fee:**

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

**K. Authorization To Do Business:**

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Christina D. DiComes, DMD shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Christina D. DiComes, DMD has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Christina D. DiComes, DMD is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-permittee or any individual exercising ownership of Christina D. DiComes, DMD shall be subject to the terms and conditions of the permit as if named herein.

**L. Closing, Selling, Moving the Business:**

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

**M. Transfer of Permit Prohibited:**

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

**N. Permit Violations:**

1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

**O. Revocation/Suspension of Permit:**

1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:

- a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
- b. Failure to report changes in operations or wastewater constituents;
- c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;
- d. Failure to adhere to an approved compliance schedule;
- e. Failure to comply with administrative orders or settlement agreements;
- f. Failure to pay authorized fees and user charges;
- g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

**P. Civil and Criminal Liability:**

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

**Q. Duty To Comply:**

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

**R. Removed Substances:**

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

**S. Permit Modification/Renewal:**

1. This permit may be modified for various reasons, including but not limited to the following:
  - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
  - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
  - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
  - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;

- e. Violation of any terms or conditions of the permit;
- f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
- g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
- h. To correct typographical or other errors in the permit;
- i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;
- j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

## **T. Integration:**

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

## **U. Jurisdiction:**

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

KG:AB:sm

### Attachments:

- Self Monitoring Compliance Report Form
- Designation of Authorized Agent Form
- RCRA Handbook
- Twenty-four (24) Hour Violation Notification Fax Form
- List of Licensed Laboratories

**Table 1**  
**NBC Effluent Discharge Limitations**  
**Bucklin Point District**

<b><u>Parameter</u></b>	<b><u>Limitation (Max)</u></b>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300.00*
Total Suspended Solids (TSS)	300.00*
Total Oil and Grease (fats, oils and grease)	125.0
Oil and Grease (mineral origin)	25.0
Oil and Grease (animal/vegetable origin)	100.0
pH range (at all times)	5.0 - 11.0 s.u.

<b><u>Parameter</u></b>	<b><u>Daily Maximum Concentration Limit (mg/l)</u></b>	<b><u>Monthly Average Concentration (mg/l)</u></b>
Arsenic (Total)	0.20	0.10
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.63
Copper (Total)	1.20	1.20
Cyanide (Total)	0.50	0.50
Lead (Total)	0.69	0.29
Mercury (Total)	0.06	0.03
Nickel (Total)	1.62	1.62
Selenium (Total)	0.40	0.20
Silver (Total)	0.40	0.20
Tin	4.00	2.00
Zinc (Total)	1.67	1.39

All limitations are in units of mg/l unless otherwise specified.

\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.



**Table 2**

**List of Toxic Pollutants**

The following list of Toxic Pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act.

<b>VOLATILES EPA METHOD 624</b>	<b>BASE/NEUTRAL - EPA METHOD 625</b>	<b>PESTICIDES - EPA METHOD 625</b>
acrolein	acenaphthene *	aldrin
acrylonitrile	acenaphthylene *	alpha-BHC
benzene	anthracene *	beta-BHC
bromoform	benzidine	gamma-BHC
carbon tetrachloride	benzo (a) anthracene *	delta-BHC
chlorobenzene	benso (a) pyrene *	chlordan
chlorodibromomethane	3,4-benzofluoranthene *	4,4'-DDT
chloroethane	benzo (ghi) perylene *	4,4'-DDE
2-chloroethylvinyl ether	benzo (k) fluoranthene	4,4'-DDD
chloroform	bis (2-chloroethoxy) methane	dieldrin
dichlorobromomethane	bis (2-chloroethyl) ether	alpha-endosulfan
1,1-dichloroethane	bis (2-chloroisopropyl) ether	beta-endosulfan
1,2-dichloroethane	bis (2-ethylhexyl) phthalate	endosulfan sulfate
1,1-dichloroethylene	4-bromophenyl phenyl ether	endrin
1,2-dichloropropane	butylbenzyl phthalate	endrin aldehyde
1,3-dichloropropylene	2-chloronaphthalene	heptachlor
ethylbenzene	4-chlorophenyl phenyl ether	heptachlor epoxide
methyl bromide	chrysene *	PCB-1242
methyl chloride	dibenzo (a,h) anthracene *	PCB-1254
methylene chloride	1,2-dichlorobenzene	PCB-1221
1,1,2,2-tetrachloroethane	1,3-dichlorobenzene	PCB-1232
tetrachloroethylene	1,4-dichlorobenzene	PCB-1248
toluene	3,3'-dichlorobenzidine	PCB-1260
1,2-trans-dichloroethylene	diethyl phthalate	PCB-1016
1,1,1-trichloroethane	dimethyl phthalate	toxaphene
1,1,2-trichloroethane	di-n-butyl phthalate	
trichloroethylene	2,4-dinitrotoluene	
vinyl chloride	2,6-dinitrotoluene	
	di-n-octyl phthalate	
	1,2-diphenylhydrazine	
	(as asobenzene)	
	fluoranthene *	
	fluorene *	
	hexachlorobenzene	
	hexachlorobutadiene	
	hexachlorocyclopentadiene	
	hexachloroethane	
	indeno (1,2,3-cd) pyrene *	
	isophorone	
	naphthalene *	
	nitrobenzene	
	N-nitrodimethylamine	
	N-nitrosodi-n-propylamine	
	N-nitrosodiphenylamine	
	phenanthrene *	
	pyrene *	
	1,2,4-trichlorobenzene	
	* = Polynuclear Aromatic Hydrocarbons	
<b>ACID COMPOUNDS - EPA METHOD 625</b>		<b>OTHER TOXIC POLLUTANTS AND TOTAL PHENOL</b>
2-chlorophenol		Antimony, Total
2,4-dichlorophenol		Arsenic, Total
2,4-dimethylphenol		Beryllium, Total
4,6-dinitro-o-cresol		Cadmium, Total
2,4-dinitrophenol		Chromium, Total
2-nitrophenol		Chromium, Hexavalent
4-nitrophenol		Copper, Total
p-chloro-m-cresol		Lead, Total
pentachlorophenol		Mercury, Total
phenol		Nickel, Total
2,4,6-trichlorophenol		Selenium, Total
		Silver, Total
		Thallium, Total
		Zinc, Total
		Asbestos
		Cyanide, Total
		Phenols, Total
		TCDD (Dioxin)

**Attachment A**

**Best Management Practice Certification**

For the 12-month period from \_\_\_\_\_, 20\_\_ to \_\_\_\_\_, 20\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RETURN TO:**  
Narragansett Bay Commission  
Pretreatment Program  
2 Ernest Street  
Providence, RI 02905-5502

I, \_\_\_\_\_, as authorized representative of  
\_\_\_\_\_, do hereby decree that the Narragansett Bay  
Commission Best Management Practices for the Management of Waste Dental Amalgam have  
been fully complied with for the past twelve month period.

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for known violations.

\_\_\_\_\_  
Authorized Representative Signature

\_\_\_\_\_  
Date

# CERTIFICATE TO DISCHARGE

the following types of process water:

**Treated Dental Process Wastewaters Containing Amalgam**

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Christina D. DiComes, DMD

1557 Hartford Avenue

Johnston, RI 02919

PERMIT NUMBER: P9400-318-0617

PERMIT EXPIRATION DATE: 06/30/2017

The discharge permit must be kept at the above address for inspection. Failure to comply with the rules and regulations of the Narragansett Bay Commission or with the conditions of the discharge permit will subject the permittee to fines of up to \$25,000 per violation per R.I.G.L. 46-25-25.3.

June 22, 2012  
Initial Date of Issuance

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager

***ATTACHMENT VOLUME I***

***SECTION 3***

***VARIOUS PRETREATMENT  
PROGRAM DOCUMENTS***

***SPILL AND SLUG PREVENTION  
CONTROL & COUNTERMEASURES  
PLAN GUIDANCE DOCUMENT***



**SPILL AND SLUG PREVENTION CONTROL PLAN  
FOR NARRAGANSETT BAY COMMISSION  
SEWER USERS**

**COMPANY NAME:** \_\_\_\_\_

**FACILITY ADDRESS:** \_\_\_\_\_

**MAILING ADDRESS:** \_\_\_\_\_

**PRIMARY PERSON RESPONSIBLE  
FOR SPILL CONTROL PREVENTION:** \_\_\_\_\_

**DAYTIME EMERGENCY PHONE NUMBER:** \_\_\_\_\_

**AFTER HOURS EMERGENCY PHONE NUMBER:** \_\_\_\_\_

The Narragansett Bay Commission's (NBC) Rules and Regulations for the Use of Wastewater Facilities (Article 8.9) require each user to provide protection from accidental discharge of prohibited materials and substances to the sewer. The user is required to provide detailed plans showing equipment and a brief description of operating procedures utilized to prevent these discharges.

This document was developed to assist you in determining what measures you need to implement and to properly document the spill prevention control procedures utilized at your facility; therefore, you must complete this document.

**Section A: Description of Discharge Practices and Storage Areas**

1. List all sources of routine sewer discharges and describe the method of discharge:

<b>Source of Discharge</b>	<b>Method of Discharge</b>
Example: Electroplating Discharges	Pumped to sewer via pretreatment system

2. List all sources of non-routine sewer discharges of an infrequent nature such as batch discharges, which may occur only once per year:

<b>Source of Discharge</b>	<b>Method of Discharge</b>
Example: Annual Power Washing of Plating Room Floors	Gravity flow to pretreatment system

3. List each room or area inside or outside of your facility in which chemicals, solvents, liquids, fuel or lubricating oils, hazardous waste, etc. may be used or stored and indicate if spill control facilities are in place to prevent a spill from reaching the sewer system.

<b>Room/Area</b>	<b>Spill Control Facilities in Place Yes/No</b>

**Attachment A must be completed for each area listed above with the exception of boiler facilities.**

4. Attach a sketch of your entire facility showing each area/room listed above. This sketch must show the location of all floor drains, open sewer connections, berms, etc. in relation to the rooms listed above. Be sure to include outside yard drains located near loading docks or storage areas. For multilevel facilities a sketch must be provided for each level of the facility.

**Section B: Spill Control Training, Equipment and Routine Inspections**

1. The NBC recommends all employees working in areas specified in Section A(3) be thoroughly trained annually in spill control procedures for their respective work areas. List all spill control training that has been conducted at your facility and indicate the frequency of training:

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2. What procedures are utilized to prevent adverse impacts on the NBC sewage facility due to accidental spills? Examples of these procedures may include periodic inspection and maintenance of storage areas, and special procedures utilized during loading and unloading operations.

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3. List emergency response equipment available and procedures to be utilized in the event of a spill.

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**Section C: Spills From Boiler and Fuel Depot Areas**

This section must be completed if fuels, or fuel oils are stored at your facility or chemicals are stored in the boiler area. Be sure to show the location of any floor drains, trenches, yard drains or other connections to the sewer or pretreatment system from the boiler facility and fuel storage area(s) in the sketch required in Section A(4). Also, show any berms or sumps that would be used to contain spills. Indicate the capacity of each holding area in gallons.

1. What types of fuel are stored in these areas? (i.e., gasoline, diesel, kerosene, #4 fuel oil, #6 fuel oil, etc.)

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2. Are the fuel tanks above ground\_\_\_\_\_ or below ground\_\_\_\_\_? Provide the capacity of each tank in gallons:

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3. Indicate provisions (i.e., alarms, sight glasses, etc.) and filling procedures that will minimize the risk of overfilling a tank.

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4. Is the storage tank equipped with an overflow pipe or relief valve or some other equipment in the tank or pipe chase network that would allow fuel to spill during a filling procedure? \_\_\_ Yes \_\_\_\_ No

5. If a tank is overfilled and fuel escapes through the tank vent pipe, where would the spilled fuel discharge?

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6. What measures and spill containment equipment are in place to contain spillage from an overfilled tank?

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7. Are boiler treatment or other chemicals stored in the boiler facility or fuel depot areas? \_\_\_\_ Yes \_\_\_\_ No

If yes describe chemicals:

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8. Detail spill containment provided for chemicals stored in this area.

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9. If a spill should occur in the fuel depot or boiler facility, how would it be cleaned up and disposed?

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10. Are there any normal process discharges such as boiler blowdown or steam condensate to the sewer or pretreatment system from physical plant operations? \_\_\_\_\_Yes \_\_\_\_\_No

11. Does the boiler utilize a hot water or steam operated oil preheater?  
 \_\_\_\_\_Yes \_\_\_\_\_No

If so, does the condensate from the preheater discharge to the sewer?  
 \_\_\_\_Yes \_\_\_\_No

If so, what measures are in place to detect an oil discharge to the sewer resulting from a leak within the preheater core?

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**Section D: Spills That Discharge to Pretreatment Systems**

This section must be completed in the case where a spill will discharge to a pretreatment system.

1. For each area listed in Section A(3) that a spill would discharge to the pretreatment system, you must provide the following information:

<b>Area</b>	<b>Solution</b>	<b>Pretreatment Collection Vessel</b>
Example: Plating	CN Bearing Solutions	CN Destruct Tank
Example: Plating	Non-CN Bearing Solution	Batch A/A Tank

2. During non-working hours, what procedures will be followed to prevent spills from discharging directly through pretreatment to the sewer without proper treatment? (e.g., shut off sump pump, close valve to sump, etc.)

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3. What procedures or facilities are in place to prevent highly concentrated or incompatible solutions (such as plating baths, oils, solvents, etc.), which the pretreatment system was not designed to treat, from reaching the pretreatment system?

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**Section E: Notification Procedures**

1. The sewer user must maintain an approved Spill and Slug Prevention Control and Countermeasure Plan and all associated facilities at all times to ensure that incidental and accidental spills are not able to enter the NBC sewer system. In the case of a slug or accidental discharge to the facilities, it is the responsibility of the sewer user to notify the NBC of the incident immediately by calling the NBC's Pretreatment Section at 461-8848. During non-business hours contact the NBC at its 24 Hour Emergency Hotline number, 222-6781 if located in the Field's Point District or at 434-6350 if located in the Bucklin Point District.
2. Within five days following an accidental discharge, the sewer user shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences.

**Section F: Certification**

I certify under penalty of law that this Spill and Slug Control Plan and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who maintain the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I certify that this facility will fully implement and maintain the Spill and Slug Control Plan at all times.

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SIGNATURE AND TITLE OF AUTHORIZED COMPANY REPRESENTATIVE

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DATE

**Attachment A\***

Area/Room: \_\_\_\_\_  
List Chemicals Stored in Area: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List the Volume of the Largest Container in Area: \_\_\_\_\_

Are there open floor drains or sewer connections in this area? \_\_\_\_\_

List spill control measures in place: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List capacity of spill containment area(s). Please note, the capacity of the containment area must be a minimum of 110% the volume of the largest container.

\_\_\_\_\_  
\_\_\_\_\_

Detail how a spill would be contained during working hours. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Detail how a spill would be contained during non-working hours. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

How will spills from this area be cleaned up and disposed? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If currently there are no spill containment measures in this area, detail proposed measures to provide spill containment for chemicals and solutions in this area and the timeframe necessary to implement these measures.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* Please make additional copies of this attachment for all areas of your facility.

***TOXIC ORGANIC/SOLVENT  
MANAGEMENT PLAN GUIDANCE  
DOCUMENT***



**NARRAGANSETT BAY COMMISSION  
TOXIC ORGANIC/SOLVENT  
MANAGEMENT PLAN**

**COMPANY NAME:** \_\_\_\_\_

**MAILING ADDRESS:** \_\_\_\_\_

**PHONE NUMBER:** \_\_\_\_\_

**PLAN PREPARED BY:** \_\_\_\_\_

In accordance with Section 7.2 of the Narragansett Bay Commission's (NBC) Rules and Regulations for the Use of Wastewater Facilities, the NBC may require any user who discharges into the facilities to provide information relating to discharges into the facilities to ensure compliance with prescribed pretreatment methods and regulations. Federal pretreatment standards, including those for metal finishers and electroplaters (40 CFR 413.03 and 433.12), require many industrial users to periodically monitor their wastestream for Total Toxic Organics (TTO's). Federal law allows the Industrial User to develop, implement and maintain a Toxic Organic/Solvent



Management Plan, which once approved by the NBC, allows the Industrial User a waiver from performing the expensive and routine TTO monitoring.

In order to provide for the control of solvents and toxic organics which are not permitted to be discharged to the NBC sewerage facilities, the NBC is requiring, as a condition of the industrial sewer user's Wastewater Discharge Permit, that a Toxic Organic/Solvent Management Plan be prepared and submitted to the NBC in lieu of the regular monitoring for toxic organic compounds and solvents.

This form has been developed as a guidance document by the NBC Pretreatment Section to assist sewer users who must prepare a Toxic Organic/Solvent Management Plan. When completed, submitted and approved by the NBC this document will constitute the facility's Toxic Organic/Solvent Management Plan. The user will then be responsible to maintain all items indicated in this plan to ensure that solvents and toxic organic compounds are not discharged into the NBC sewerage system.

**Section A – Estimated Annual Solvent Purchases and Usages:**

Does your firm use any solvents, chemicals or compounds containing any of the toxic organic compounds listed on the EPA table of toxic organics attached to this document, or any other solvents, such as xylene, acetone, etc., not listed on the attached table? \_\_\_\_\_

If yes, you must complete all sections of this Toxic Organic/Solvent Management Plan. If no, you must sign the certification Section F of this plan.

List the type and estimated amount of solvents or toxic organic chemicals purchased and used yearly at this facility and provide a brief description detailing the usage of the chemical. A list of EPA toxic organic compounds is attached for your information. In addition to the compounds on this list, any other solvents purchased or used on the premises must be included (i.e. Acetone, 100 gallons/yr., used for paint removal).

Solvent	Use of Solvent	Estimated Gallons Annually Purchased

**Section B – Estimate of Solvents Stored and Annually Disposed:**

You must account for the total gallons of each solvent or toxic organic chemical listed in Section A. Indicate the estimated volume of each chemical presently stored on site and the estimated volume disposed of annually by

each method of disposal (e.g. reclamation, contract hauler, consumption in product, evaporation, sewer discharge or other) and the total estimated gallons on site and disposed of annually. **The total gallons listed here for each chemical must equal the total gallons listed in Section A for the same chemical.**

Solvent	Gallons Typically Stored On Site	GALLONS DISPOSED ANNUALLY						Total Gallons Stored, Used, or Disposed Annually
		Discharged In Wastewater	Evaporated During Usage	Reclaimed On-site	Shipped Off-site	Consumed or Retained In Product	Other (Indicate Gallons & Disposal Method)	

**Section C – Wastewater Analysis:**

Has your process wastewater ever been analyzed for any or all of the toxic organic compounds or solvents listed in Section A?

\_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, please attach a copy of the analysis. If no, this monitoring must be conducted and the analytical results for each toxic organic compound and solvent listed in Section A must be attached to the plan.

**Section D – Solvent Process Operations:**

1. For each of the toxic organic compounds or solvents listed in Section A, provide a brief description of the process in which the chemical is used and describe in detail the work methods used to prevent and prohibit toxic organic and solvent dragout, drippage and spillage from entering the wastewater discharged from the facility.

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2. For any solvent listed in Section B as being discharged in the wastewater, please provide a brief description detailing the discharge method, practice, procedure, or process operation resulting in each solvent discharge.

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**Section E – Spill Control Procedures:**

Describe the spill control procedures in effect for the toxic organic compounds and solvent on the premises. This would include measures taken in both the chemical storage area and in the work area to prevent incidental and accidental spillage from entering the NBC sewerage system. Measures to prevent and control spillage may include berms, sealed floor drains, absorbent material, etc. Indicate the volume of the largest vessel within each storage area and the capacity of the storage area itself. Please note that a storage area is required to contain a minimum of 110% the capacity of the largest vessel stored within it.

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**Section F – Certification Statement:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry or the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, concluding the possibility of fine

and imprisonment for knowing violations. I hereby certify that based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for Total Toxic Organics (TTO), to the best of my knowledge and belief, no dumping of concentrated toxic organic compounds into the wastewaters has or does occur. I further certify that this facility is implementing and will abide by this Toxic Organic/Solvent Management Plan as submitted to the NBC.

\_\_\_\_\_  
SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

# List of Toxic Pollutants

The following List of Toxic Pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act.

## Volatiles

### EPA Method 624

arolein  
acrylonitrile  
benzene  
bromoform  
carbon tetrachloride  
chlorobenzene  
chlorodibromomethane  
chloroethane  
2-chloroethylvinyl ether  
chloroform  
dichlorobromomethane  
1,1-dichloroethane  
1,2-dichloroethane  
1,1-dichloroethylene  
1,2-dichloropropane  
1,3-dichloropropylene  
ethylbenzene  
methyl bromide  
methyl chloride  
methylene chloride  
1,1,2,2-tetrachloroethane  
tetrachloroethylene  
toluene  
1,2-trans-dichloroethylene  
1,1,1-trichloroethane  
1,1,2-trichloroethane  
trichloroethylene  
vinyl chloride

## Acid Compounds

### EPA Method 625

2-chlorophenol  
2,4-dichlorophenol  
2,4-dimethylphenol  
4,6-dinitro-o-cresol  
2,4-dinitrophenol  
2-nitrophenol  
4-nitrophenol  
p-chloro-m-cresol  
pentachlorophenol  
phenol  
2,4,6-trichlorophenol

## Base/Neutral

### EPA Method 625

\* acenaphthene  
\* acenaphthylene  
\* anthracene  
benzidine  
\* benzo (a) anthracene  
\* benzo (a) pyrene  
\* 3,4-benzofluoranthene  
\* benzo (ghi) perylene  
benzo (k) fluoranthene  
bis (2-chloroethoxy) methane  
bis (2-chloroethyl) ether  
bis (2-chloroisopropyl) ether  
bis (2-ethylhexyl) phthalate  
4-bromophenyl phenyl ether  
butylbenzyl phthalate  
2-chloronaphthalene  
4-chlorophenyl phenyl ether  
\* chrysene  
\* dibenzo (a, h) anthracene  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
3,3-dichlorobenzidine  
diethyl phthalate  
dimethyl phthalate  
di-n-butyl phthalate  
2,4-dinitrotoluene  
2,6-dinitrotoluene  
di-n-octyl phthalate  
1,2-diphenylhydrazine  
(as azobenzene)  
\* fluoranthene  
\* fluorene  
hexachlorobenzene  
hexachlorobutadiene  
hexachlorocyclopentadiene  
hexachloroethane  
\* indeno (1,2,3-cd) pyrene  
isophorone  
\* naphthalene  
\* nitrobenzene  
N-nitrosodimethylamine  
N-nitrosodi-n-propylamine  
N-nitrosodiphenylamine  
\* phenanthrene  
\* pyrene  
1,2,4-trichlorobenzene

## Pesticides

### EPA Method 625

aldrin  
alpha – BHC  
beta – BHC  
gamma – BHC  
delta – BHC  
chlordan  
4,4' – DDT  
4,4' – DDE  
4,4' – DDD  
dieldrin  
alpha-endosulfan  
beta-endosulfan  
endosulfan sulfate  
endrin  
endrin aldehyde  
heptachlor  
heptachlor epoxide  
PCB-1242  
PCB-1254  
PCB-1221  
PCB-1232  
PCB-1248  
PCB-1260  
PCB-1016  
toxaphene

## Other Toxic Pollutants and Total Phenol

Antimony, Total  
Arsenic, Total  
Beryllium, Total  
Cadmium, Total  
Chromium, Total  
Chromium, Hexavalent  
Copper, Total  
Lead, Total  
Mercury, Total  
Nickel, Total  
Selenium, Total  
Silver, Total  
Thallium, Total  
Zinc, Total  
Asbestos  
Cyanide, Total  
Phenols, Total  
TCDD (Dioxin)

\*= Polynuclear Aromatic Hydrocarbons

***SIGNIFICANT INDUSTRIAL USER  
ANNUAL INSPECTION CHECKLIST***



NARRAGANSETT BAY COMMISSION



Annual Inspection Checklist
For Significant Industrial Sewer Users

Company Name: \_\_\_\_\_ Engineer: \_\_\_\_\_
Contact Person(s): \_\_\_\_\_ Date: \_\_\_\_\_
Other Person(s) in Attendance: \_\_\_\_\_
Company Classification: Electroplater \_\_\_\_\_ Metalfinisher \_\_\_\_\_
Other (specify): \_\_\_\_\_

Part I - Outstanding Requirements/Progress Since Last Inspection

(a) What progress was required of the firm since the last annual inspection? \_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

(b) Has required work been completed? Yes No
If no, when will it be completed? \_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

(c) What work has facility initiated on its own to improve wastewater discharge? \_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

(d) Has facility expanded/scaled down operations? Yes No
If yes, describe. \_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

(e) Have all monitoring reports been submitted on time? Yes No
If no, discuss ramifications of late submittals/SNC with user. \_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

(f) Has firm been in compliance for the past twelve (12) month period? Yes No  
If no, list problem parameter(s) and discuss with user. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(g) Are samples being taken at the frequency required in the permit (i.e., monthly, bimonthly), analyzed for all parameters required, and all resampling results submitted? Yes No N/A  
If no, explain. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Part II - Pretreatment Equipment and Process Operations**

(a) List all water using process operations and describe each process operation.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(b) Is there a pretreatment system in operation? Yes No  
Describe, in full, the pretreatment technology presently being provided for each treated wastestream. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(c) Who operates the pretreatment system? \_\_\_\_\_  
\_\_\_\_\_

(d) List all water using operations that are **not** pretreated (e.g. casting, tubbing, boiler blowdown, cooling water, etc.). \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(e) Is there an operation and maintenance manual maintained on site for pretreatment system? Yes No N/A

(f) Are there any spare parts maintained on site for the pretreatment equipment? Yes No N/A

If yes, list spare parts. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(g) Has system been installed according the NBC specifications? Yes No N/A

If no, what needs to be corrected? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* Check pretreatment system piping, decant ports, transfer pumps, pH recording probe location, etc.

(h) Has system been installed according to NBC approved plans? Yes No N/A

If no, what needs to be corrected? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* Compare plans with existing system.

(i) Have changes been made to process operations or pretreatment system without NBC notification and approval? Yes No

If yes, detail changes. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(j) Are any hydroxide sludges or other sludges produced at this facility from pretreatment operations? Yes No

If so, indicate type of sludge, volume, and source (e.g. Hydroxide sludge from clarifier, etc.) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(k) Is any type of sludge discarded in the trash? Yes No  
If yes, specify. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(l) Are any concentrates or other hazardous materials removed by hazardous waste contractors (e.g. spent solvents, etc.)? Yes No  
If yes, list types and amounts. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(m) Does the facility utilize ion-exchange resins? Yes No  
If yes, are ion-exchange columns regenerated on site? Yes No  
If yes, how often are columns regenerated? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

How is regenerate material disposed of? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

How are columns regenerated? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Has the Pretreatment staff observed and sampled during the regeneration procedure? Yes No

If no, be sure to observe and arrange sampling of the regenerant.

**Part III - Maintenance and Record Keeping**

(a) Is pH recording/reporting required? Yes No  
(i) Are pH charts being maintained? Yes No N/A

(ii) Do pH charts agree with monthly reports? Yes No N/A  
 If no, detail inaccuracies. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(iii) Are the pH charts being dated properly (month, day, and year)?  
 Yes No N/A

(b) Provide the following pre-inspection pH calibration data:

NBC pH Pen # \_\_\_\_\_ Date of Calibration: \_\_\_\_\_  
 (mm/dd/yy)

(c) Are facility pH probes in calibration at the time of the inspection?  
 Yes No N/A

pH readings: NBC \_\_\_\_\_ s.u. Company \_\_\_\_\_ s.u.

\* If discrepancy is greater than 0.5 s.u., and NBC instrument is verified to be in calibration, deficiency should be noted.

(d) How often are pH and/or ORP probes cleaned and calibrated? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(e) If discrepancy was observed, check instruments using the company's buffer solutions and complete the following:

	<u>#1</u>	<u>#2</u>	<u>#3</u>
pH of buffer			
pH using NBC instrument			
pH registered by facility instrument			
Expiration date of buffer			

If discrepancy was observed, a post inspection calibration check must be performed at Pretreatment lab on the same day as the inspection and the following must be completed:

- a) NBC Instrument pH in buffer 4.0: \_\_\_\_\_
- b) NBC Instrument pH in buffer 7.0: \_\_\_\_\_
- c) NBC Instrument pH in buffer 10.0: \_\_\_\_\_

(f) Is the facility required to maintain a logbook? Yes No

If yes, is the logbook being maintained? Yes No

Does the logbook properly document the following?

- |   |     |    |     |
|---|-----|----|-----|
| (i) Batch discharges?                                       | Yes | No | N/A |
| (ii) Chemicals used for pretreatment system?                | Yes | No | N/A |
| (iii) Sludge generated on a daily, weekly or monthly basis? | Yes | No | N/A |
| (iv) Maintenance performed on pretreatment system?          | Yes | No | N/A |
| (v) Visual inspecting data for boiler room discharges?      | Yes | No | N/A |
| (vi) Grease interceptor inspection?                         | Yes | No | N/A |
| (vii) Other special logbook requirements                    | Yes | No | N/A |

If yes, please specify \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- (g) Have Hazardous Waste Manifest forms been properly maintained on site?  
 Yes No N/A

**Part IV - Spill, Slug and Solvent Discharge Control**

- (a) Is a Spill & Slug Prevention Control Plan (SSPCP) necessary based upon the facility inspection? Yes No
- (b) Has a SSPCP been submitted? Yes No N/A
- (c) Has a SSPCP been approved? Yes No N/A

(d) Detail how a spill in the process and pretreatment areas would be contained.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(e) Detail how a spill in the chemical storage area(s) would be contained: (Be sure to check both inside and outside storage areas, outside solvent holding tanks, etc.). \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(f) Are spill control measures physically in place as stated in SSPCP? Yes No N/A

\* Check for open drains or other direct sewer access points.

(g) Is spill control in the boiler room satisfactory? Yes No N/A  
 If no, what will be required to ensure proper containment in the boiler room. \_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(h) Based upon the facility inspection and observations noted in d, e, f, and g above, is the existing SSPCP accurate and sufficient? Yes No N/A  
 If no, why? \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

(i) Is submission of a Toxic Organic/Solvent Management Plan (TO/SMP) necessary? Yes No

(j) Has TO/SMP been submitted? Yes No N/A

(k) Has TO/SMP been approved? Yes No N/A

(l) Is there proper containment of solvents as stated in the TO/SMP? Yes No N/A

(m) Is the existing TO/SMP accurate and sufficient? Yes No N/A

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Part V - Process Flow Measurement**

(a) How many flow meters are used to measure process wastewater discharges?  
 \_\_\_\_\_

(b) Complete the following table for each process

<u>Location</u>	<u>Process Operation Monitored</u>	<u>Readings</u>	<u>Units</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- (c) Are these flow meter readings an accurate measurement of process flows?  
Yes No N/A
- (d) If not, list user's estimate of the percent of total flow used for process water.  
\_\_\_\_%
- (e) Based upon \_\_\_\_\_, for the period from \_\_\_\_\_ to \_\_\_\_\_, the average daily process flow is \_\_\_\_\_GPD.
- (f) Based upon daily flow calculation, is user properly classified for permit fee billing purposes?  
Yes No N/A

**Part VI - Sampling Procedures**

- (a) Where should representative samples be taken for NBC and self-monitoring? \_\_\_\_  
\_\_\_\_\_
- (b) Are samples taken here presently? Yes No  
If no, why not? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- (c) Are non-contact cooling water or other dilution streams discharged upstream of the sampling location? Yes No
- \* Check degreaser cooling water and steam condensate discharge lines.
- (d) Must the combined wastestream formula be used to determine compliance with EPA categorical pretreatment standards? (e.g. Does wastewater discharge through more than one (1) location?) Yes No
- (e) Does the firm conduct its own sample collection? Yes No  
If not, specify: \_\_\_\_\_
- (f) Is method of sample collection acceptable? Yes No  
If no, why not? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- (g) If firm is a metalfinisher, does cyanide sampling satisfy EPA requirements? Yes No N/A

If no, what must be changed? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



- (h) Are sample collection procedures adequate?
- (i) Samples refrigerated after collection? Yes No N/A
- (ii) Proper preservation techniques used? Yes No N/A
- (iii) How long are samples held before delivery to the laboratory for analysis? \_\_\_\_\_  
 \_\_\_\_\_

**PART VII - LABORATORY ANALYSIS**

- (a) Is a commercial laboratory used? Yes No  
 If so, which lab? \_\_\_\_\_
- (b) Is commercial lab state certified? Yes No N/A
- (c) For in-house analysis:
- (i) Are duplicate samples analyzed? Yes No N/A
- (ii) Are spiked samples used? Yes No N/A
- (iii) Are equipment and instruments calibrated and maintained?  
 Yes No N/A
- (iv) Is there a quality assurance plan in effect? Yes No N/A
- (v) Is in-house lab state certified? Yes No N/A
- (vi) If yes, request and attach copy of in-house lab certification and approved parameters.

**Part VIII - User Education**

- (a) Educate users about each of the following:
- Significant Non-Compliance (SNC) Criteria: Yes No
- NBC Mission Statement: Yes No
- Purpose and Types of NBC Inspections: Yes No
- Monitoring and Reporting Requirements/Procedures: Yes No
- Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Engineers Comments:** \_\_\_\_\_

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**What will be required of firm?** \_\_\_\_\_

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***DENTAL FACILITY  
INSPECTION CHECKLIST***

NARRAGANSETT BAY COMMISSION



Inspection Checklist For Dental Facilities

Company Name: Facility Address: Inspection Date: NBC Inspector(s): Person(s) met with:

Part I - Facility Information

- (1) Company Owner: (2) Contact Person: (3) Phone Number: (4) Hours of Operation: (5) Type of Dental Facility: (6) Make/Model of Amalgam Separator:

Part II - Requirements/Progress Since Last Inspection

- (1) What was required of the firm since the last inspection? (2) Has required work been completed? Yes No If no, when will it be completed? (3) Have all required reports (BMP Certification, SMCRs) been submitted on time? Yes No If no, discuss the ramifications of late submittals and SNC with the user (4) Has the firm been in compliance for the past 12 month period? Yes No If no, detail the compliance issues and discuss with the user.

**Part III – Amalgam Separator Maintenance/Installation Information**

(1) Has the amalgam separator been installed according to NBC approved plans? \* Yes    No

If no, what needs to be corrected? \_\_\_\_\_  
\_\_\_\_\_

\* Compare plans with existing system.

(2) Have changes been made without NBC notification and approval? Yes    No

If yes, detail changes. \_\_\_\_\_  
\_\_\_\_\_

(3) Unit accessible? Yes    No

(4) Solids container was present and operational? Yes    No

(5) Level of sediment in solids collection container: \_\_\_\_\_

(6) Date solids container was last replaced/emptied: \_\_\_\_\_

(7) Sample port was properly installed? Yes    No

(8) Unit has been properly maintained? Yes    No

(9) How is waste amalgam disposed of? \_\_\_\_\_  
\_\_\_\_\_

(10) Type of vacuum pumps installed: \_\_\_\_\_  
Verify that vacuum pump is equipped with a filter.

(11) Number of sinks discharging to the separator: \_\_\_\_\_  
Verify that all sinks discharging to the separator are properly designated for equipment washing only.

(12) Are chair side traps present on all dental chairs? Yes    No  
Verify that chair side traps are being inspected daily and cleaned or replaced as necessary.

(13) Type of line cleaner used: \_\_\_\_\_

(14) Is elemental mercury stored onsite? If yes, how is it stored and disposed of? \_\_\_\_\_  
\_\_\_\_\_

## **Part IV – X-Ray Processor System Information**

- (1) Is x-ray processing performed at this facility? Yes No
- (2) Are there discharges to the sewer from x-ray processing operations? Yes No  
If yes, detail discharges. \_\_\_\_\_  
\_\_\_\_\_
- (3) Is there a silver recovery unit in place? Yes No
- (4) Has silver recovery unit been installed according to NBC approved plans? \* Yes No  
If no, what needs to be corrected? \_\_\_\_\_  
\_\_\_\_\_
- \*Compare plans with existing system.
- (5) Sample port was properly installed? Yes No
- (6) Unit has been properly maintained? Yes No

## **Part V – Record Keeping**

- (1) Is the amalgam separator logbook being maintained? Yes No  
If yes, is the logbook being maintained Daily Weekly Monthly
- (2) Does the amalgam separator logbook properly document the following?
- a. The date of each separator inspection and service activity? Yes No
- b. The location of each trap and separator being serviced? Yes No
- c. All routine and non routine activities conducted (i.e. cleaning, maintenance, filter replacement)? Yes No
- d. Signature of person conducting activity? Yes No
- (3) Is the facility required to maintain a x-ray processor system logbook? Yes No
- (4) Does the x-ray processor system logbook properly document the following?
- a. Amount of chemicals used (i.e. fixer, developer)? Yes No N/A
- b. Completed manifest forms for hazardous materials? Yes No N/A
- c. A listing of all batch discharges including the date of the discharge and a description of the tank from which the discharge occurred? Yes No N/A
- d. Maintenance performed on the pretreatment system? Yes No N/A

**Part VI - User Education**

(1) Educate users about each of the following:

NBC Dental BMP Program:	Yes	No
Permit/Logbook Requirements:	Yes	No
Monitoring and Reporting Requirements/Procedures:	Yes	No
Comments: _____		

\_\_\_\_\_

**Comments:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
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**What will be required of firm?** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

***FOOD PREPARATION  
ESTABLISHMENTS INSPECTION  
CHECKLIST***



# NARRAGANSETT BAY COMMISSION



## Inspection Checklist For Food Preparation Establishments

Inspection Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Address: \_\_\_\_\_

Technician/Engineer: \_\_\_\_\_

Person(s) met with: \_\_\_\_\_

### Part I - Facility Information

- (1) Company Owner: \_\_\_\_\_
- (2) Contact Person: \_\_\_\_\_
- (3) Type of GRU: \_\_\_\_\_
- (4) Brand of GRU: \_\_\_\_\_
- (5) Size of GRU: \_\_\_\_\_
- (6) Type of food served: \_\_\_\_\_
- (7) Hours of Operation: \_\_\_\_\_
- (8) Seating Capacity: \_\_\_\_\_
- (9) Based upon seating capacity, is user properly classified for permit fee billing purposes?                      Yes      No
- (10) Menu on file?                      Yes      No
- (11) Drive through window?      Yes      No

### Part II - Requirements/Progress Since Last Inspection

(1) What was required of the firm since the last inspection? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) Has required work been completed?                      Yes      No  
If no, when will it be completed? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Part III - GRU Maintenance/Installation Information**

(1) Has grease removal system been installed according to NBC approved plans? \*  
Yes No N/A

If no, what needs to be corrected? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* Compare plans with existing system.

(2) Have changes been made without NBC notification and approval? (kitchen fixtures, menu, grease removal unit, etc.) Yes No

If yes, detail changes. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(3) Unit accessible? Yes No N/A

(4) Power supplied to GRU? Yes No N/A

(5) GRU solids basket was present and operational? Yes No N/A

(6) Solids basket had been emptied? Yes No N/A

(7) GRU wiper blades were fully operational? Yes No N/A

(8) GRU trough was clean and operational? Yes No N/A

(9) GRU timer was fully operational? Yes No N/A

(10) GRU installed in accordance with NBC requirements? Yes No N/A

(11) Sample port was properly installed? Yes No N/A

(12) Grease container present? Yes No N/A

(13) Unit has been properly cleaned? Yes No N/A

(14) How is waste grease disposed of? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **Part IV - Record Keeping**

- |  |       |        |         |
|--|-------|--------|---------|
| (1) Is the facility required to maintain a logbook?                                  | Yes   | No     |         |
| If yes, is the logbook being maintained  | Daily | Weekly | Monthly |
| (2) Does the logbook properly document the following?                                |       |        |         |
| a. Cleaning and emptying of solids basket?   | Yes   | No     | N/A     |
| b. Cleaning of wiper blades?   | Yes   | No     | N/A     |
| c. Cleaning of trough?   | Yes   | No     | N/A     |
| d. Estimated amount of grease removed?   | Yes   | No     | N/A     |
| e. Wet vacuuming of the GRU?   | Yes   | No     | N/A     |
| f. Thickness of the grease layer (passive)?  | Yes   | No     | N/A     |
| g. Mandatory monthly cleanings incl. amount of grease removed, date, time (passive)? | Yes   | No     | N/A     |
| h. Maintenance performed?  | Yes   | No     | N/A     |
| i. Physical receipts for each pump-out retained?                                     | Yes   | No     | N/A     |

## **Part V - User Education**

- (1) Educate users about each of the following:

NBC Grease Removal Program: Yes No

Permit/Logbook Requirements: Yes No

Monitoring and Reporting Requirements/Procedures: Yes No

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Comments:** \_\_\_\_\_

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**What will be required of firm?** \_\_\_\_\_

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Company Name: \_\_\_\_\_ Automatic GRU \_\_\_ Outdoor In-Ground \_\_\_

## NBC Fats Oil and Grease (FOG) (Waste Oil & Grease) Environmental Results Program BMP Checklist

### Pre Clean-Up

1. Are pots, pans and other dishware wiped clean (Dry Clean-up) before washing (i.e. are food scraps and O&G scraped into trash and/or are paper towels used to wipe away excess O&G)? Yes No
2. Are Dry Clean-up activities ever monitored by a supervisor? Yes No
3. Are employees given formal instruction/training not to allow O&G or food waste to enter drains? Yes No
4. Are "No O&G Discharge" signs placed over appropriate sinks? Yes No

### O&G On-Site Management/Handling

1. Does the facility have use fryalator(s)? - # of fryalator units \_\_\_\_\_ Yes No  
If Yes: How often is oil replaced in each unit? \_\_\_\_\_  
How much oil is placed in each unit? \_\_\_\_\_  
How is waste "Yellow Grease" from fryalator(s) managed? \_\_\_\_\_ *(shipped off site/  
placed in trash/other)*  
Is waste O&G picked-up by a waste grease hauler? Yes No  
If Yes: What is the name and phone number of the hauler? \_\_\_\_\_  
\_\_\_\_\_  
How much O&G is typically collected? \_\_\_\_\_ / \_\_\_\_\_ *Example (50 gallons/month)*  
Quantity Units Frequency  
How is waste O&G ultimately managed? \_\_\_\_\_
2. Does the facility use In-Door GRU(s)? - # of GRU units \_\_\_\_\_ Yes No  
If Yes: How often is Brown Grease remove from the GRU(s)? \_\_\_\_\_  
How is Brown Grease quantity determined? \_\_\_\_\_ *(Estimated/Measured)*  
How much Brown Grease is typically collected? \_\_\_\_\_ / \_\_\_\_\_ *Example (1 cup/day)*  
Quantity Units Frequency  
How is Brown Grease managed? \_\_\_\_\_ *(shipped off site/  
placed in trash/other)*

Company Name: \_\_\_\_\_ Automatic GRU \_\_\_\_ Outdoor In-Ground \_\_\_\_

3. Does the facility have an Out-Door Grease Interceptor? Yes No

If Yes: How often is the Interceptor pumped out? \_\_\_\_\_

How is pump out waste quantity determined? \_\_\_\_\_ (Estimated/Measured)

How much pump out waste is typically collected? \_\_\_\_\_ / \_\_\_\_\_ Example (1,000 gal/quarter)  
Quantity Units Frequency

What is the name and phone number of the hauler? \_\_\_\_\_

\_\_\_\_\_

How is pump out waste ultimately managed? \_\_\_\_\_

4. Are employees trained in O&G spill management procedures? Yes No

5. Are spill clean-up kits available and readily accessible (should include absorbent material, broom, shovel and container for collected material)? Yes No

6. Is there a designated employee(s) responsible for O&G management? Yes No

7. Are formal safe handling procedures in place for transferring collected O&G from kitchen to storage/disposal area? Yes No

8. Is waste O&G stored indoors? Yes No

If yes:

Is O&G stored away from floor drains? Yes No

Are O&G containers labeled? Yes No

9. Is any waste O&G stored outside? Yes No

If yes:

Are outside O&G storage bins kept closed? Yes No

Are O&G containers labeled? Yes No

Are outside O&G storage bins located away from storm drains? Yes No

Are outside O&G storage bins supplied with secondary containment? Yes No

Are outside O&G storage bins checked for leaks on a regular basis? Yes No

***NBC SAMPLING, REPORTING, AND  
CHAIN OF CUSTODY FORMS***



**The Narragansett Bay Commission**  
 Pretreatment Program  
 2 Ernest Street  
 Providence, RI 02905

**Field's Point District**  
**Self-Monitoring Compliance Report**

Company Name: \_\_\_\_\_  
 Address of Premises Sampled: \_\_\_\_\_  
 Date(s) Sampled: \_\_\_\_\_  
 Permit Sampling Month Satisfied: \_\_\_\_\_  
 Samples Taken By: \_\_\_\_\_  
 (Name) (Company)

Samples Analyzed By: \_\_\_\_\_  
 (Company)

Type of Sample: Grab \_\_\_\_\_ Composite \_\_\_\_\_  
 If Grab Sample, what time(s) was sample taken? \_\_\_\_\_  
 If Composite Sample, describe how composite was taken \_\_\_\_\_

Where was sample taken? \_\_\_\_\_

Water Meter Readings (List readings for all meters discharging to sampling location)

	#1	#2	#3
Closing Reading:	_____	_____	_____
Opening Reading:	_____	_____	_____
Total:	_____	_____	_____
Units (Circle One):	Cubic Feet/Gallons	Cubic Feet/Gallons	Cubic Feet/Gallons
	Other (Specify):_____	Other (Specify):_____	Other (Specify):_____

Were any batch discharges sampled? \_\_\_\_\_ Yes \_\_\_\_\_ No  
 What tank was sample taken from? \_\_\_\_\_  
 Indicate volume of batch discharge: \_\_\_\_\_

Is this analysis a resampling required to demonstrate compliance with a previous violation?  
 \_\_\_\_\_ Yes \_\_\_\_\_ No

What is the sample identification number(s) or the analytical report identification number(s) indicated on the analytical report(s) being submitted? \_\_\_\_\_

Is this analysis in full compliance with NBC standards listed on the back of this form?  
 \_\_\_\_\_ Yes \_\_\_\_\_ No

If your firm was in violation, what was the cause of the violation? \_\_\_\_\_

What steps will be taken by your firm to ensure full compliance with NBC standards on a continuous basis? \_\_\_\_\_

When will these steps be implemented? \_\_\_\_\_



If your firm is not in full compliance with the NBC standards, U.S. EPA Regulations, 40 CFR 403.12g (2) requires that you notify the NBC at 461-8848 within 24 hours of becoming aware of the violation and that your firm resample and analyze for the parameter(s) in violation of the NBC standards. The results after resampling must be submitted to the NBC no later than thirty (30) days following the date that you became aware of the initial violation of the standards.

Please attach the laboratory analysis sheet. Indicate on this sheet the method of analysis used for each parameter listed. Sampling and analysis shall be performed in accordance with the techniques prescribed by federal regulations (40 CFR, Part 136).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. In lieu of monitoring for Total Toxic Organics, I hereby certify that based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitations for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic/solvent management plan submitted to the NBC.

\_\_\_\_\_  
Signature of Authorized Company Representative

\_\_\_\_\_  
Date

**Report will be returned if form is not properly completed and signed.**

**NBC Field's Point Effluent Discharge Limitations\***

<b>Parameter</b>	<b>Maximum Daily Concentration Limit (mg/l)</b>	<b>Monthly Average Concentration (mg/l)</b>
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.71
Copper (Total)	1.20	1.20
Cyanide (Total)	0.58	0.58
Lead (Total)	0.60	0.40
Mercury (Total)	0.005	0.005
Nickel (Total)	1.62	1.62
Silver (Total)	0.43	0.24
Zinc (Total)	2.61	1.48
<b>Parameter</b>	<b>Limitation (Maximum)</b>	
Total Toxic Organics (TTO)	2.13	
Biochemical Oxygen Demand (BOD)	300.00 **	
Total Suspended Solids (TSS)	300.00 **	
Total Oil and Grease (fats, oils and grease)	125.00	
Oil and Grease (mineral origin)	25.00	
Oil and Grease (vegetable origin)	100.00	
pH range (at all times)	5.0 - 10.0 s.u.	

\* All parameters in mg/l unless otherwise specified.

\*\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.



If your firm is not in full compliance with the NBC standards, U.S. EPA Regulations, 40 CFR 403.12g (2) requires that you notify the NBC at 461-8848 within 24 hours of becoming aware of the violation and that your firm resample and analyze for the parameter(s) in violation of the NBC standards. The results after resampling must be submitted to the NBC no later than thirty (30) days following the date that you became aware of the initial violation of the standards.

Please attach the laboratory analysis sheet. Indicate on this sheet the method of analysis used for each parameter listed. Sampling and analysis shall be performed in accordance with the techniques prescribed by federal regulations (40 CFR, Part 136).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. In lieu of monitoring for Total Toxic Organics, I hereby certify that based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitations for Total Toxic Organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic/solvent management plan submitted to the NBC.

\_\_\_\_\_  
Signature of Authorized Company Representative

\_\_\_\_\_  
Date

**Report will be returned if form is not properly completed and signed.**

**NBC Bucklin Point Effluent Discharge Limitations\***

<b>Parameter</b>	<b>Maximum Daily Concentration Limit (mg/l)</b>	<b>Monthly Average Concentration (mg/l)</b>
Arsenic (Total)	0.20	0.10
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.63
Copper (Total)	1.20	1.20
Lead (Total)	0.69	0.29
Mercury (Total)	0.06	0.03
Nickel (Total)	1.62	1.62
Selenium (Total)	0.40	0.20
Silver (Total)	0.40	0.20
Tin (Total)	4.00	2.00
Zinc (Total)	1.67	1.39
Cyanide (Total)	0.50	0.50
<b>Parameter</b>	<b>Limitation (Maximum)</b>	
Total Toxic Organics (TTO)	2.13	
Biochemical Oxygen Demand (BOD)	300.00 **	
Total Suspended Solids (TSS)	300.00 **	
Total Oil and Grease (fats, oils and grease)	125.00	
Oil and Grease (mineral origin)	25.00	
Oil and Grease (vegetable origin)	100.00	
pH range (at all times)	5.5 - 9.5 s.u.	

\* All parameters in mg/l unless otherwise specified.

\*\* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.



## TWENTY-FOUR (24) HOUR VIOLATION NOTIFICATION FAX FORM

**Fax To:** Narragansett Bay Commission  
(401) 461-0170

**Company Name:** \_\_\_\_\_

**Facility Address:** \_\_\_\_\_  
\_\_\_\_\_

This is to notify the Narragansett Bay Commission (NBC) that the above-referenced facility violated the NBC discharge limitations for the following parameter(s):

<u>Sampling Date of Violation</u>	<u>Parameter</u>	<u>Concentration</u>

I certify that I have just become aware of the above-referenced violation(s) within the past twenty-four (24) hours and will immediately resample this wastestream for the parameter(s) exceeding the NBC discharge limitations.\* I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Initial sampling and all resampling results must be submitted within 30 days of the sample date. Please note, resampling must continue until four consecutive samples show compliance with NBC discharge limitations.

\_\_\_\_\_  
Signature of Authorized Agent

\* Resampling is not required for exceeding BOD or TSS limits.

**CONTINUOUS DISCHARGE  
PH MONITORING REPORT**  
MONTH OF: \_\_\_\_\_ 20 \_\_\_\_\_



Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Return to: **Narragansett Bay Commission**  
**Pretreatment Section**  
**2 Ernest Street**  
**Providence, RI 02905**

Date	MAXIMUM pH	MINIMUM pH	AVERAGE pH (VISUAL)	VOLUME/WATER METER READING IF REQUIRED*	COMMENTS
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I certify the above data has been reported directly from the recording chart of the final pH recorder and is reported to an accuracy of 0.1 standard units.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Title

\*INDICATE IF GALLONS OR CUBIC FEET

**BATCH DISCHARGE  
Ph MONITORING REPORT  
MONTH OF: \_\_\_\_\_ 20 \_\_\_\_**



Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Return to: **Narragansett Bay Commission**  
**Pretreatment Section**  
**2 Ernest Street**  
**Providence, RI 02905**

Date	Batch Discharge I		Batch Discharge II		Batch Discharge III		Batch Discharge IV		COMMENTS
	Final pH	Vol.	Final pH	Vol.	Final pH	Vol.	Final pH	Vol.	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									

Please indicate the method used to measure pH: \_\_\_\_\_

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Title

# Zero Process Wastewater Discharge Certification

For the Month of \_\_\_\_\_, 20\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**RETURN TO:**

Narragansett Bay Commission

Pretreatment Program

2 Ernest Street

Providence, RI 02905

I, \_\_\_\_\_, as authorized representative of

\_\_\_\_\_, do hereby decree that no process wastewater was discharged into

the Narragansett Bay Commission sewer system for the past six (6) month period.

Date of Meter Readings: \_\_\_\_\_

<u>Meter Number</u>	<u>Water Meter Readings</u>	<u>Units (cf, gal.)</u>
Meter #1	_____	_____
Meter #2	_____	_____
Meter #3	_____	_____

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Authorized Representative Signature

\_\_\_\_\_  
Date

**Attachment A**

**Zero Process Wastewater Discharge Certification**

For the Six (6) Month Period from

\_\_\_\_\_ to \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RETURN TO:**  
Narragansett Bay Commission  
Pretreatment Program  
2 Ernest Street  
Providence, RI 02905-5502

I, \_\_\_\_\_, as authorized representative of \_\_\_\_\_, do hereby decree that no process wastewater was discharged into the Narragansett Bay Commission sewer system for the past six (6) month period.

Date of Meter Readings: \_\_\_\_\_

<u>Meter Number</u>	<u>Water Meter Readings</u>	<u>Units (cf, gal.)</u>
Meter #1	_____	_____
Meter #2	_____	_____
Meter #3	_____	_____

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for known violations.

\_\_\_\_\_  
Authorized Representative Signature

\_\_\_\_\_  
Date



**Attachment A**

**Best Management Practice Certification**

For the 12-month period from \_\_\_\_\_, 20\_\_ to \_\_\_\_\_, 20\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RETURN TO:**  
Narragansett Bay Commission  
Pretreatment Program  
2 Ernest Street  
Providence, RI 02905-5502

I, \_\_\_\_\_, as authorized representative of  
\_\_\_\_\_, do hereby decree that the Narragansett Bay  
Commission Best Management Practices for the Management of Waste Dental Amalgam have been  
fully complied with for the past twelve month period.

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for known violations.

\_\_\_\_\_  
Authorized Representative Signature

\_\_\_\_\_  
Date

# NARRAGANSETT BAY COMMISSION SAMPLE SUBMISSION SHEET

SOURCE: \_\_\_\_\_ EMDA# \_\_\_\_\_ DATE: \_\_\_\_\_  
 STREET: \_\_\_\_\_ SAMPLER # \_\_\_\_\_ TIME: \_\_\_\_\_  
 CITY/STATE: \_\_\_\_\_ COLLECTED BY: \_\_\_\_\_  
 SAMPLE LOCATION: \_\_\_\_\_ FACILITY CONTACT: \_\_\_\_\_  
 INSTRUCTIONS: \_\_\_\_\_

## PARAMETERS FOR ANALYSIS\*

Cd _____	Ag _____	BOD (5 day) _____
Cr (Total) _____	Zn _____	TSS _____
Cr (Hex.) _____	Hg _____	FOG _____
Cu _____	CN (Total) _____	TPH _____
Pb _____	VOC _____	( ) _____
Ni _____	Ext _____	( ) _____

\*All analyses done according to 40 CFR part 136. Results reported in mg/l unless specified otherwise.

## FIELD AND PRESERVATION DATA

Sample Information					Preservation Chemicals Added								
Sample No.	Sample Time Start/Stop	Analyze For	Sample Type (G) or (C)	Initial pH	Nitric Acid (ml)	Hydro-Chloric Acid (ml)	Res. Cl (+) or (-)	Lead Acetate (+) or (-)	NaOH (ml)	Ascorbic Acid (g)	Other	Final pH	Sealed By
A													
B													
C													
D													
E													
F													
G													
H													
I													
J													
K													
L													
M													

Did user accept a split or replicate sample?

Sample	A	B	C	D	E	F	G	H	I	J	K	L	M	Signature
Yes														
No														

Meter Readings	Meter #1	Meter #2	Meter #3	Meter #4
Close				
Open				
Total	(c.f., gals)	(c.f., gals)	(c.f., gals)	(c.f., gals)

REMARKS \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**CHAIN OF CUSTODY**

Samples transferred by: \_\_\_\_\_  
 Samples received by: \_\_\_\_\_  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

Samples transferred by: \_\_\_\_\_  
 Samples received by: \_\_\_\_\_  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

Samples transferred by: \_\_\_\_\_  
 Samples received by: \_\_\_\_\_  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

RESULTS REPORTED BY: \_\_\_\_\_

RESULTS REPORTED ON: \_\_\_\_\_

**NARRAGANSETT BAY COMMISSION**

Source \_\_\_\_\_

Sample ID \_\_\_\_\_

Initials of Collectors: \_\_\_\_\_

Place of Collection: \_\_\_\_\_

Date Sampled \_\_\_\_\_ Time Sampled \_\_\_\_\_

Analysis Requested \_\_\_\_\_

Rec'd From \_\_\_\_\_ Date \_\_\_\_\_

Rec'd By \_\_\_\_\_ Time \_\_\_\_\_

**NARRAGANSETT BAY COMMISSION**

Source \_\_\_\_\_

Sample ID \_\_\_\_\_

Initials of Collectors: \_\_\_\_\_

Place of Collection: \_\_\_\_\_

Date Sampled \_\_\_\_\_ Time Sampled \_\_\_\_\_

Analysis Requested \_\_\_\_\_

Rec'd From \_\_\_\_\_ Date \_\_\_\_\_

Rec'd By \_\_\_\_\_ Time \_\_\_\_\_

**CUSTODY SEAL**

DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

**QEC**

Quality Environmental Containers  
800-255-3950 • 304-255-3900

**CUSTODY SEAL**

DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

**QEC**

Quality Environmental Containers  
800-255-3950 • 304-255-3900

**DEFINITION OF AN AUTHORIZED AGENT**



An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the company's by-laws or per a vote of the directors if the company is a corporation; a general partner or proprietor if the company is a partnership or sole proprietorship respectively; or a duly authorized representative, the individual designated on the permit application or permit cover page, if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the company. Please complete the Designation Of Authorized Agent section below if you wish to designate additional authorized agents. The Narragansett Bay Commission will not accept documents signed by persons other than the company's authorized agent(s) or authorized representative(s).

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**DESIGNATION OF AUTHORIZED AGENT**

I, \_\_\_\_\_ certify that I am the \_\_\_\_\_ of  
\_\_\_\_\_ and that \_\_\_\_\_  
is authorized to make submittals to the Narragansett Bay Commission on behalf of \_\_\_\_\_  
\_\_\_\_\_ and that said submittals are duly signed for and  
in behalf of said corporation by authority of its governing body, and are within the scope of  
its corporate powers.

\_\_\_\_\_  
Corporate Seal

\_\_\_\_\_  
Signature of Corporation Official

\_\_\_\_\_  
Date

***ATTACHMENT VOLUME I***

***SECTION 4***

***SAMPLE ENFORCEMENT LETTERS,  
NOTICES, AND ORDERS***

NOTICE OF VIOLATION  
FAILURE TO MEET STANDARDS (USER SAMPLE)



March 29, 2012

Mr. Walter Bennett  
Ira Green, Inc.  
177 Georgia Avenue  
Providence, RI 02905

Dear Mr. Bennett:

The sample results for February which were received by this office on March 26, 2012 indicate that you are in violation of discharge limitations for the following:


**Sample Location # 3**

Sample Date	Chemical	Sample Type	Sample Result	Standard Type	Max. Limit	Avg. Limit
2/7/2012	CYANIDE-EPA	Grab	2.1	EPA	1.20	0.65

As a condition of your Wastewater Discharge Permit, these discharge limitations must be met at all times. Failure to meet the standards may result in the Commission initiating enforcement action against your firm and the publication of your company's name in the Commission's annual list of firms in Significant Non-Compliance which is published each year in the PROVIDENCE JOURNAL. Based upon these results, you must immediately resample your process discharge for the parameter(s) in violation noted above. You must continue this weekly sampling until four (4) consecutive weekly reports indicate full compliance with NBC discharge limitations. Results must be submitted for NBC review within three (3) weeks from the sampling date.

Please note that the NBC Office of Pollution Prevention is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848. If you should have any questions regarding this letter, contact me at 461-8848.

Sincerely,

  
Nathan P. Daggett  
Pretreatment Engineer

NOTICE OF VIOLATION  
FAILURE TO MEET STANDARDS (NBC SAMPLE)



Mr. Frank A. DiFruscio  
DiFruscia Industries, Inc.  
20-A Starr Street  
Johnston, RI 02919

April 02, 2012

Dear Mr. DiFruscio:

Enclosed please find the results of the analyses performed by the Narragansett Bay Commission (NBC) Laboratory on a sample taken by the Bay Commission personnel at your facility on March 12, 2012. These results indicate that you are in violation of Narragansett Bay Commission (NBC) discharge limitations for the following:

**Sample Location # 1**

Sample Date	Chemical	Sample Type	Sample Result	Standard Type	Max. Limit	Avg. Limit
3/12/2012	NICKEL	Composite	1.893	LOCAL	1.62	1.62
3/12/2012	COPPER	Composite	2.452	LOCAL	1.20	1.20

As a condition of your Wastewater Discharge Permit, these discharge limitations must be met at all times. Failure to meet the standards may result in the Commission initiating enforcement action against your firm and the publication of your company's name in the Commission's annual list of firms in Significant Non-Compliance which is published each year in the PROVIDENCE JOURNAL. Based upon these results, you must immediately resample your process discharge for the parameter(s) in violation noted above. You must continue this weekly sampling until four (4) consecutive weekly reports indicate full compliance with NBC discharge limitations. Results must be submitted for NBC review within three (3) weeks from the sampling date.

Please note that the NBC Office of Pollution Prevention is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848. If you should have any questions regarding this letter, contact me at 461-8848.

Sincerely,

A handwritten signature in black ink, appearing to read "Abigail Sweeney".

Abigail Sweeney  
Principal Pretreatment Eng.



## WASTEWATER SAMPLE ANALYSIS

Company Name: DiFruscia Industries, Inc.  
Company Address: 20-A Starr Street  
Johnston, RI 02919  
Location Name: Sample Location # 1  
Type of Sample: Composite  
Date of Sample: March 12, 2012

Parameter	Concentration (mg/l)
CADMIUM	0.015
CHROMIUM	0.19
COPPER	2.452
CYANIDE	0.013
LEAD	0.075
NICKEL	1.893
SILVER	0.025
ZINC	0.202

Review By:

Abigail Sweeney  
Principal Pretreatment Eng.



NOTICE OF VIOLATION  
AVERAGE LIMIT VIOLATION



July 02, 2012

Mr. Sean Hill  
Denison Pharmaceuticals, Inc. (Lincoln)  
1 Powder Hill Road  
Lincoln, RI 02865

Dear Mr. Hill:

The results of sampling conducted at your firm for the month of May-2012 show that you are in violation of average discharge limitations for the following:

**Sample Location # 1**

Parameter	# of Analyses	Standard Type	Avg. Conc.	Avg. Limit	Type
ZINC	4	LOCAL	2.8125	1.39	NBC MONTHLY

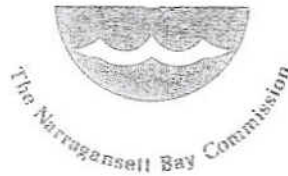
As a condition of your Wastewater Discharge Permit and as required by U.S. EPA regulations, monthly average discharge limitations must be met at all times. Failure to meet the monthly average standards may result in the NBC initiating enforcement action against your firm and the possible publication of your company's name in the NBC annual list of firms in Significant Non-Compliance which is published each year in the PROVIDENCE JOURNAL. Therefore it is important to always be in compliance with the monthly average discharge concentration, in addition to the maximum discharge limit. It is strongly recommended that you sample early each required sampling month to allow adequate time to resample in that month, should the initial result indicate that the monthly average limit was exceeded.

Please note that the NBC Office of Pollution Prevention is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848 Ext. 352. If you should have any questions regarding this letter, contact me at 461-8848 Ext. 490.

Sincerely,

Nathan P. Daggett  
Pretreatment Engineer

Notice of Violation  
Failure to Meet Standards (Manhole)



October 11, 2012

Mr. George Tanury  
G. Tanury Plating Company  
100 Railroad Avenue  
Johnston, RI 02919

Dear Mr. Tanury:

The Narragansett Bay Commission (NBC) regularly conducts surveillance monitoring of its users. This monitoring is done by installing automatic samplers in manholes located up and down stream of a company, effectively isolating that company. The samplers are programmed to collect composite samples of the wastewater discharging through the manhole.

On September 5 through September 6, 2012 the NBC conducted surveillance manhole sampling up and down stream of your facility. The analytical results from the down stream manhole indicate noncompliance with the following parameters:

<u>Parameter</u>	<u>Sampling Type</u>	<u>Results (mg/L)</u>	<u>Daily Maximum (mg/L)</u>	<u>Average (mg/L)</u>
Copper	Composite	1.25	1.20	1.20
Nickel	Composite	4.27	1.62	1.62

It has been determined that your firm is the source of the non-compliant wastewater since the upstream results were in compliance for these parameters. You must submit a report by October 30, 2012 detailing the cause of the high concentration of metals and a proposal to ensure that wastewater from your facility is in compliance at all times.

Please note that the NBC is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848.

If you have any questions regarding this letter, please contact me at 461-8848 ext. 490.

Sincerely,

  
Nathan Daggett  
Pretreatment Engineer

Attachment



### Manhole Sample Analysis

Company: G. Tanury Plating Company  
Address: 100 Railroad Avenue  
Johnston, RI 02919  
Date of Sample: September 5 through 6, 2012  
Type of Sample: Composite

<u>Parameter</u>	<u>Upstream Manhole Concentration (mg/L)</u>	<u>Downstream Manhole Concentration (mg/L)</u>
Cadmium	<0.015	<0.015
Chromium	<0.075	<0.075
Copper	<0.02	1.25
Cyanide	0.004836	0.03106
Lead	<0.075	<0.075
Nickel	<0.05	4.27
Silver	<0.025	0.0359
Zinc	<0.06	0.262
pH (standard units)	7.0	10.5

Reviewed by:

Nathan J. Dean  
Assistant Pretreatment Manager

**Notice of Violation  
Failure to Immediately Report Violation**

March 16, 2012



Mr. John Arakelian, Jr.  
Unique Plating Company  
66 Mill Street  
Johnston, RI 02919

Dear Mr. Arakelian, Jr.:

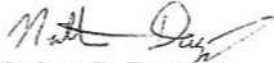
The Self-Monitoring Compliance report which was received by this office on March 13, 2012 indicated non-compliance with the NBC discharge limitations. U.S. E.P.A. regulations, 40 C.F.R. 403.12g(2), require that you notify the Commission within 24 hours of becoming aware of this violation.

You failed to comply with this regulation since you did not notify the Commission within the 24 hour reporting period. This is not acceptable. In the future you must report any discharge violation within 24 hours by contacting me at 461-8848 or by using the attached FAX notification form.

In addition to notifying the Commission immediately regarding the violation, EPA regulations require that you repeat the sampling and analyses for the parameter(s) in violation and submit the resample results within thirty (30) days of becoming aware of the initial violation of the standards. Please note that the Commission requires that you begin weekly wastewater sampling for the parameter(s) in violation until such time that four (4) consecutive weekly sampling reports indicate full compliance with the NBC discharge limits. Failure to comply with these regulations and requirements may result in the initiation of enforcement action against your firm.

If you should have any questions regarding this matter, contact me at 461-8848.

Sincerely,

  
Nathan P. Daggett  
Pretreatment Engineer

NOTICE OF VIOLATION  
NOTICE OF PH VIOLATIONS



August 31, 2012

Mr. Joseph Accaoui  
Tanury Industries  
6 New England Way  
Lincoln, RI 02865

Dear Mr. Accaoui:

I have reviewed the July pH Monitoring Report submitted on August 28, 2012. Based upon this report, your facility has exceeded the pH discharge limitation as follows:

LOW LIMIT VIOLATIONS

4

HIGH LIMIT VIOLATIONS

1

Effluent discharge to the Narragansett Bay Commission (NBC) sewer system must have a pH between the range of 5.0 - 11.0 standard units (s.u.) at all times. Discharging effluent with a pH value of less than 5.0 s.u. or higher than 11.0 s.u. is prohibited. pH effluent, that does not fall in the accepted range, may not be discharged to the NBC sewer system, even if the discharge is only for a short period of time. You must immediately take the steps necessary to prevent future violations from occurring. We will review future monitoring reports to ensure compliance with this parameter.

Please note that the NBC Office of Pollution Prevention is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848.

Please feel free to contact me at 461-8848 if you have any questions regarding this matter.

Sincerely,

Abigail Bernier  
Principal Pretreatment Eng.



July 27, 2012

Mr. Michael Deltoro  
B. Deltoro & Sons, Inc.  
393 Harris Avenue  
Providence, RI 02908

Dear Mr. Deltoro:

The sampling results for July which were received by this office on July 26, 2012 indicate that your firm has exceeded Narragansett Bay Commission (NBC) surcharge limitations for the following:

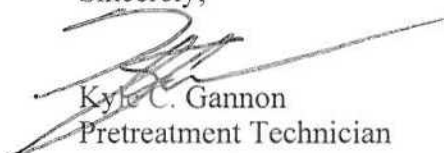
**Sample Location # 1**

Sample Date	Parameter	Sample Type	Sample Results	Surcharge Limitation
7/12/2012	TSS	GRAB	4490	300
7/12/2012	BOD	GRAB	1190	300

Exceeding the BOD or TSS standards of 300 ppm will be permitted but will be subject to a surcharge of \$87.00 per 1000 pounds discharged in excess of 300 ppm. The Commission does not require resampling for the BOD or TSS parameters when exceeding these surcharge limits.

You may contact me at 461-8848 if you have any questions on this matter.

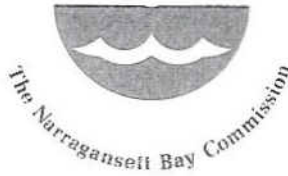
Sincerely,



Kyle C. Gannon  
Pretreatment Technician

NOTICE OF VIOLATION  
FAILURE TO SUBMIT COMPLIANCE REPORT

July 31, 2012



Mr. C. Charles Blanchard  
Evans Plating Corporation (N.P.)  
P.O. Box 113856  
Centredale, RI 02911

Dear Mr. Blanchard:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit compliance monitoring results for the month(s) of:

**Sample Location # 1**  
June-2012

To date, the Commission has not received a copy of these analytical results. Until a certified copy of the results and a Self-Monitoring Compliance Report are received, you are in violation of the terms of your permit. Failure to submit compliance monitoring results within thirty (30) days of the due date will result in your firm being in Significant Non-Compliance with the NBC and EPA regulations and will automatically result in the publication of the name of your firm in the Providence Journal. Please note that the NBC will bill you for the cost of this public notice. In addition, the Commission may initiate enforcement action against your firm for failing to submit reports on time. Should such an enforcement action be initiated, administrative penalties of up to \$25,000 per violation per day can be assessed.

Sincerely

A handwritten signature in black ink, appearing to read "Nathan P. Daggett".

Nathan P. Daggett  
Pretreatment Engineer

NOTICE OF VIOLATION  
FAILURE TO SUBMIT PH MONITORING REPORT



May 01, 2012

Mr. Gilberto Arteaga  
Accent Plating Company  
25 Esten Avenue  
Pawtucket, RI 02860

Dear Mr. Arteaga:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit pH results for the month(s) of:

**Sample Location # 1**  
March 2012

To date, the Commission has not received a copy of the above referenced pH monitoring report(s). Until a signed copy of the above referenced pH monitoring report(s) are received, you are in violation of the terms of your permit. Failure to submit pH monitoring results within thirty (30) days of the due date will result in your firm being in Significant Non-Compliance (SNC) with the NBC and EPA regulations and will automatically result in the publication of the name of your firm in the NBC annual list of violators published in the Providence Journal. Please note that the NBC will bill you for the cost of this public notice. In addition, the Commission may initiate enforcement action against your firm for failing to submit reports on time. Should such an enforcement action be initiated, administrative penalties of up to \$25,000 per violation per day can be assessed.

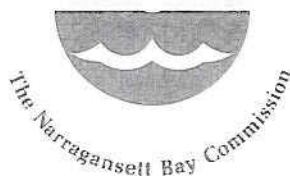
Sincerely,

A handwritten signature in black ink, appearing to read "Nathan P. Daggett", is written over a faint circular stamp.

Nathan P. Daggett  
Pretreatment Engineer



NOTICE OF VIOLATION  
FAILURE TO SUBMIT CERTIFICATION OF NO DISCHARGE



August 1, 2012

Mr. Matthew Franco  
Portola Tech International  
35 Martin Street  
Cumberland, RI 02864

Dear Mr. Franco:

In accordance with your permit issued by the Narragansett Bay Commission (NBC), it is necessary for you to submit Certification of No Discharge for the month of:

June-2012

To date, the NBC has not received a copy of the above referenced certification. Until a signed copy of the above referenced certification is received, you are in violation of the terms of your permit. Failure to submit Certification of No Discharge within thirty (30) days of the due date will result in your firm being in Significant Non-Compliance (SNC) with the NBC and EPA regulations and will automatically result in the publication of the name of your firm in the NBC annual list of violators published in the Providence Journal. Please note that the NBC will bill you for the cost of this public notice. In addition, the Commission may initiate enforcement action against your firm for failing to submit reports on time. Should such an enforcement action be initiated, administrative penalties of up to \$25,000 per violation per day can be assessed.

Sincerely,



Kyle Gannon  
Pretreatment Technician

KG:sm

**NOTICE OF VIOLATION  
FAILURE TO SUBMIT BMP CERTIFICATION**

December 4, 2012



Dr. Charles M. Riotto  
Angell Street Dental Associate  
425 Angell Street  
Providence, RI 02906

Dear Dr. Riotto:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit Best Management Practice (BMP) Certification for the period ending:

October - 2012

To date, the Commission has not received a copy of the above referenced certification. Until a signed copy of the above referenced certification is received, you are in violation of the terms of your permit. Failure to submit BMP Certification within thirty (30) days of the due date will result in your firm being in Significant Non-Compliance (SNC) with the NBC and EPA regulations and will automatically result in the publication of the name of your firm in the NBC annual list of violators published in the Providence Journal. Please note that the NBC will bill you for the cost of this public notice. In addition, the Commission may initiate enforcement action against your firm for failing to submit reports on time. Should such an enforcement action be initiated, administrative penalties of up to \$25,000 per violation per day can be assessed.

Sincerely,

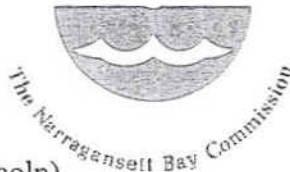


Kyle Gannon  
Pretreatment Technician

KG:rg

**Notice Of Violation  
Failure To Analyze for All Required Parameters**

August 21, 2012



Mr. Sean Hill  
Denison Pharmaceuticals, Inc. (Lincoln)  
1 Powder Hill Road  
Lincoln, RI 02865

Dear Mr. Hill:

I have reviewed the July 2012 self-monitoring compliance report you submitted on August 07, 2012. In accordance with the conditions of your permit, you were to have analyzed Sample Location # 1 for TTO, BOD, TSS, ISOPROPYL ACETATE, METHYLENE CHLORIDE, ETHYL ACETATE, N-AMYL ACETATE, ACETONE, OIL & GREASE-T, ZINC, COPPER. The aforementioned sample was not analyzed for ISOPROPYL ACETATE, METHYLENE CHLORIDE, ETHYL ACETATE, N-AMYL ACETATE. In order to fulfill this monitoring requirement, you must take an additional sample for the aforementioned parameter(s) by August 26, 2012. The sample must be analyzed for ISOPROPYL ACETATE, METHYLENE CHLORIDE, ETHYL ACETATE, N-AMYL ACETATE and the analytical results must be received by September 25, 2012.

If you have any questions regarding this matter, please contact me 461-8848

Sincerely

A handwritten signature in black ink, appearing to read "Nathan P. Daggett".

Nathan P. Daggett  
Pretreatment Engineer

NOTICE OF VIOLATION  
FAILURE TO SATISFY NBC REQUIREMENTS



August 3, 2012

Mr. Glen Johnson  
Microfibres, Inc.  
One Moshassuck Street  
Pawtucket, RI 02860-4873

Dear Mr. Johnson:

Per the requirements of letter(s) from this office, the following item was required to be completed and/or submitted by the due date indicated below:

<u>Required Submittal</u>	<u>Notice</u>	<u>Issue Date</u>	<u>Due Date</u>
June 2012 Daily Water Meter Readings	Permit	07/01/12	07/30/12

You must satisfy the past due Narragansett Bay Commission (NBC) requirement as detailed in the above referenced document. Your failure to complete the aforementioned requirement within thirty (30) days from the specified due date will place your firm in Significant Non-Compliance (SNC) with Commission regulations and will automatically result in the publication of the name of your firm as a violator in the PROVIDENCE JOURNAL. Your continued failure to complete this requirement may result in the initiation of enforcement action against your firm. Please note that the Commission can assess administrative and civil penalties of up to \$25,000 per violation per day should an enforcement action be initiated.

If you should have any questions regarding this matter, contact me at 461-8848, ext. 490.

Sincerely,



Kyle C. Gannon  
Pretreatment Technician

KCG:smb

NOTICE OF VIOLATION  
LETTER OF DEFICIENCY



June 29, 2012

Mr. Brian Carter  
Cintas, Inc.  
300 Highland Corporate Drive  
Cumberland, RI 02864-1787

**Certified Mail**  
**Return Receipt Requested**

91 7108 2133 3937 9743 4015

Dear Mr. Carter:

This letter serves to summarize the Narragansett Bay Commission (NBC) annual inspection conducted at your firm on June 12, 2012. Mr. Tom Ruo represented your firm. During the inspection the following deficiencies were noted:

1. Your firm has not been properly recording and reporting effluent pH values as accurately as required by the NBC. The pH recording chart must be dated daily (month, day and year) and effluent pH values must be reported directly from the chart to an accuracy of 0.1 standard units. You must also ensure that your circular pH charts are not allowed to overlap and record over the previous day to ensure accurate pH reporting is possible. Please do not hesitate to contact this office if you have any questions regarding the NBC pH recording or reporting requirements. NBC staff is available to provide assistance regarding this matter.
2. Your firm is not maintaining a logbook recording the amount of chemicals used to provide pretreatment, sludge generation and maintenance performed on the pretreatment system. You must immediately begin to record the aforementioned information in your pretreatment system logbook. The record keeping requirements for your firm are detailed in Section F of your Wastewater Discharge Permit (copy enclosed). Should your firm require assistance with your log book requirements and/or pH reporting, I am available to assist your firm.

Failure to correct the above-mentioned deficiencies can result in the initiation of enforcement action against your firm. Please note that the Commission can assess administrative penalties of up to \$25,000 per violation per day. In addition to correcting the aforementioned deficiencies, you must complete the following:

3. Your firm has recently begun to treat and discharge wastewater generated from offsite carpet cleaning. As discussed, you must complete and submit the enclosed permit application so that a revised permit can be issued to your firm to include this additional permitted wastestream. A completed NBC Wastewater Discharge Permit must be received by this office by July 30, 2012.
4. During the inspection proper sample collection procedures were reviewed. You must ensure that your firm is collecting all samples in accordance with EPA protocols, following the procedures detailed in Section E(2) and summarized in Table 2 of your Wastewater Discharge Permit (copy enclosed).

Please note that the NBC is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848, ext. 352.

During the inspection your firm was provided with a copy of the NBC notice detailing the proper disposal methods that should be utilized during the annual facility vacation shutdown. Thank you in advance for your cooperation to ensure proper waste disposal during the vacation shutdown period.

If you have any questions regarding this matter or require further assistance, please contact me at 461-8848, ext. 490.

Sincerely,



Abigail Bernier  
Principal Pretreatment Engineer

AB:smb

Enclosures

cc: Tom Ruo - Cintas Corporation

July 3, 2012



Mr. Francis Salazar  
Auntie Anne's Pretzels  
Providence Place Mall  
Providence, RI 02903

**Certified Mail**  
**Return Receipt Requested**

91 7108 2133 3937 9743 4473

Dear Mr. Salazar:

It has come to my attention from the Narragansett Bay Commission (NBC) pretreatment staff that your company has failed to submit a Wastewater Discharge Permit Application and Pretreatment Plans, which has been overdue since March 14, 2012. Notices of Violation have been issued and have been presumably ignored by your firm.

This default is in violation of the NBC Rules and Regulations. The NBC has the authority to fine persons violating provisions of any permit, rule, regulation, or order and may assess an administrative penalty of up to twenty-five thousand (\$25,000) dollars per day for each violation.

Please be advised that if this matter is not satisfactorily addressed within thirty (30) days, enforcement action will follow. Should you have any questions regarding the NBC requirements of your firm, you should contact Kyle C. Gannon at 461-8848 extension 490. Thank you for your anticipated cooperation.

Very truly yours,

Mario Martone, Esq.  
Associate Legal Counsel

MM:rg

cc: Kyle C. Gannon - NBC  
Mr. Greg Avekien – Senior Operations Manager





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

401 • 461 • 8848  
401 • 461 • 6540 FAX  
TTY (RI RELAY OPERATOR) 711

<http://www.narrabay.com>



Vincent J. Mesolella  
Chairman

Raymond J. Marshall, P.E.  
Executive Director

## NARRAGANSETT BAY COMMISSION

### ADMINISTRATIVE ORDERS #FP-01-09 and #FP-02-09

#### IN THE MATTER OF:

**MAZEY ALARACHI**  
d/b/a MAZEY'S RESTAURANT  
1029 Charles Street  
North Providence, RI 02904

And

2017 Smith Street  
North Providence, RI 02911

#### CONSENT ORDER

WHEREAS, Rhode Island General Laws ("R.I.G.L.") Title 46, Chapter 25 ("Act") established the Narragansett Bay Commission ("NBC" or "Commission") to acquire, plan, construct, improve, operate and maintain the publicly owned sewage treatment facilities in the district. The Act vests authority in the NBC to establish a sewage pretreatment program and to enforce any violations of the provisions of the Act, and any rule, regulation, permit or Administrative Order issued pursuant thereto; and

WHEREAS, Mazey Alarachi (Alarachi) owns and operates two restaurants located at 2017 Smith Street, North Providence, Rhode Island ("Smith Street Restaurant") and 1029 Charles Street, North Providence, Rhode Island ("Charles Street Restaurant"), which discharge process wastewater containing pollutants into the NBC's facilities; and

WHEREAS, Alarachi was issued Wastewater Discharge Permits for the Smith Street Restaurant, Permit #P8501-236-0712 and the Charles Street Restaurant, Permit #P8500-653-0712 (collectively referred to as "Permits"); and

WHEREAS, on or about October 8, 2008 the NBC issued Administrative Compliance Order and Penalty Assessments #FP-01-09 and #FP-02-09 (collectively referred to as "Administrative Orders") against Mazey Alarachi d/b/a Mazey's Restaurant alleging that Mazey Alarachi had violated the Act and the Commission's Rules and Regulations promulgated thereunder, namely: failure to comply with terms of the Permits; to wit: failure to install a sample port on the discharge line of the three-bay sink at the Smith Street Restaurant; failure to comply with terms of the Permits; to wit: failure to conduct a five-day sampling for Total Oil and Grease for each restaurant location; failure to comply with terms of the Permits; to wit: failure to submit the sample results for total oil and grease and the Self Monitoring Compliance Report (SMCR) for October 2007 for each restaurant location; failure to comply with terms of the Permits; to wit: failure to submit the sample results for total oil and grease and the SMCR for April 2008 for each restaurant location; failure to comply with terms of the Permits; to wit: failure to submit the sample results for total oil and grease and the SMCR for October 2008 for each restaurant location; failure to comply with terms of the Permits; to wit: failure to submit the sample results for total oil and grease and the SMCR for April 2009 for each restaurant location; and

WHEREAS, in lieu of proceeding to an Administrative Hearing, the NBC and Alarachi have determined that it is in the best interest of all the parties and in the public interest to resolve the claims alleged in the Administrative Orders by the terms of the agreement set forth herein; and

WHEREAS, the NBC finds that this Consent Order is a reasonable and fair settlement and adequately protects the public interest in accord with the Act; and

NOW, THEREFORE, before the taking of any testimony, without any adjudication or admission of any issue of fact or law, and upon consent and agreement of the parties to this Consent Order it is hereby **ORDERED** that:

#### JURISDICTION

1. The NBC has jurisdiction over the subject matter of this Consent Order and the parties consenting hereto pursuant to R.I.G.L. 46-25-25. In accordance with R.I.G.L. 46-25-25.4 the Rhode Island Superior Court for Providence County has jurisdiction to enforce the provisions of this Consent Order.

#### APPLICATION

2. The provisions of this Consent Order shall be binding upon Alarachi, his agents, employees, successors and assigns.

#### TERMS AND CONDITIONS

3. **ADMINISTRATIVE PENALTY:**
  - A. The NBC has determined that Five Thousand Dollars (\$5,000.00) is a fair and reasonable Administrative Penalty to assess against Alarachi with regard to the Administrative Orders.

- B. Payment of said Five Thousand Dollars (\$5,000.00) shall be made in thirty-six (36) installment payments commencing October 1, 2010 and due on the first of each consecutive month thereafter. Each installment shall be in the amount of One Hundred Thirty-Eight Dollars and 89/100 (\$138.89). Payments shall be by check made due and payable to "Narragansett Bay Commission - Environmental Enforcement Fund" and mailed, postage prepaid, or delivered to the NBC, attention of Jennifer J. Harrington, Esquire at One Service Road, Providence, Rhode Island, 02905.

4. **COMPLIANCE:**

Alarachi shall comply with the following requirements as a condition of this Consent Order:

- A. Within 20 days of the date this Consent Order is executed, Alarachi shall install a sample port on the discharge line of the three-bay sink at the Smith Street Restaurant.
- B. Within 45 days of the date this Consent Order is executed, Alarachi shall conduct the required five-day sampling for total oil and grease for both the Smith Street Restaurant and the Charles Street Restaurant. All samples shall be collected and analyzed in accordance with NBC Rules and Regulations and the Permits. Alarachi may continue to discharge wastewater in accordance with his Permits, provided that the following conditions are met:
- (i) All required samples are collected, analyzed, and submitted pursuant to the terms of the Permits; and
  - (ii) Wastewater samples shall not exceed the effluent discharge limit for Total Oil and Grease as set forth in the Permit for the Smith Street Restaurant; and
  - (iii) Wastewater samples shall not exceed the effluent discharge limit for Total Oil and Grease as set forth in the Permit for the Charles Street Restaurant.
- C. It shall be Alarachi's responsibility to collect samples, have them analyzed by a certified laboratory and submit a completed Self Monitoring Compliance Report, Certificate of Analysis and Chain of Custody to NBC for the Smith Street Restaurant and the Charles Street Restaurant as required by the Permits.
- D. Alarachi shall collect 6 additional samples from the Smith Street Restaurant and 6 additional samples from the Charles Street Restaurant to satisfy the samples which were not submitted from October, 2007 to April, 2010. The sample results must be submitted by November 30, 2010.
- E. Alarachi shall comply with all sampling and reporting requirements set forth in the Permits in a timely manner. Failure to submit any required

report within thirty (30) days of the date due shall be a violation of this Consent Order.

- F. NBC reserves the right to conduct independent sampling to confirm, validate or contest the results of any sample results submitted by Alarachi. Alarachi hereby grants NBC the right to make unannounced entry into either restaurant location during normal business hours to obtain a wastewater sample.
- G. Alarachi shall comply with all terms and conditions of the Permits.
- H. Alarachi shall install a Grease Removal Unit (GRU) of suitable size and design for the Smith Street Restaurant on or before June 1, 2011. The GRU shall be installed in accordance with NBC Rules and Regulations, including, without limitation installation in accordance with plans approved by NBC.
- I. Alarachi shall install a GRU of suitable size and design for the Charles Street Restaurant on or before June 1, 2011. The GRU shall be installed in accordance with NBC Rules and Regulations, including, without limitation installation in accordance with plans approved by NBC.

5. **STIPULATED PENALTY:**

- A. In the event that any sample obtained from the Smith Street Restaurant and analyzed in accordance with paragraphs 4A through 4F above, exceeds the parameters set forth in the Permits, including, without limitation, the limit of 125 mg/l for Total Oil and Grease (fats, oil and grease), then the following Stipulated Penalty shall be imposed:

Within thirty (30) days of obtaining the sample results, Alarachi shall install a GRU of suitable size and design for the Smith Street Restaurant. The GRU shall be installed in accordance with NBC Rules and Regulations, including, without limitation, installation in accordance with plans approved by NBC.

- B. In the event that any sample obtained from the Charles Street Restaurant and analyzed in accordance with paragraphs 4A through 4F above, exceeds the parameters set forth in the Permits, including, without limitation, the limit of 125 mg/l for Total Oil and Grease (fats, oil and grease), then the following Stipulated Penalty shall be imposed:

Within thirty (30) days of obtaining the sample results, Alarachi shall install a GRU of suitable size and design for the Charles Street Restaurant. The GRU shall be installed in accordance with NBC Rules and Regulations, including, without limitation, installation in accordance with plans approved by NBC.

- C. In the event that Alarachi fails to comply with the Stipulated Penalty set forth in paragraphs 5A and/or 5B above or failure to comply with any of the Compliance obligations set forth in paragraphs 4I through 4J above,

NBC may seek equitable relief in the Providence County Superior Court to enforce compliance. NBC reserves the right to issue additional Administrative Orders and/or Administrative Penalties as a result of such noncompliance. Such Administrative Penalties may include, but not be limited to, all reasonable court costs and attorneys fees incurred by the NBC in enforcing this provision.

6. **FORCE MAJEURE:**

- A. In the event that there is any dispute as to whether all or a portion of Alarachi's failure to comply with any of the requirements under this Consent Order was caused by circumstances beyond his reasonable control, Alarachi shall have the burden of proof to show :
- (i) that the noncompliance was caused solely by circumstances beyond Alarachi's reasonable control; and
  - (ii) that each continued day of noncompliance that resulted was caused solely by circumstances beyond Alarachi's reasonable control; and
  - (iii) that Alarachi employed all reasonable mitigating measures to minimize the duration and impact of the noncompliance.
- B. The granting of relief from any obligations by the operation of Section A. above shall have no effect on any other obligations enumerated under this Consent Order.
- C. The provisions in Section A. above shall be inoperative unless Alarachi notifies the Pretreatment Program Manager in writing, within fourteen (14) days from the start of any noncompliance, of his belief that all or any portion of the noncompliance is solely the result of circumstances beyond reasonable control.

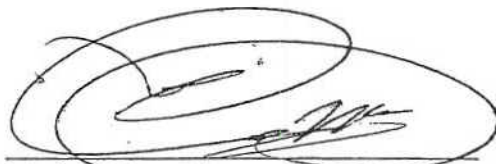
GENERAL PROVISIONS

7. This Consent Order is not a permit and in no way relieves Alarachi of his responsibility to comply with any permit or any subsequent amendments thereto that may be issued by the NBC.
8. This Consent Order shall constitute full and final satisfaction for the violations alleged in the Administrative Orders and discharges any liability of Alarachi to the NBC for all violations and claims arising from the factual allegations contained in the Administrative Orders.
9. Alarachi hereby consents to the issuance of this Consent Order as a final order by the NBC's Executive Director. In so consenting, Alarachi has personally read and understood all of the terms and conditions of this Consent Order.
10. Alarachi hereby waives his right to the hearing provided by Article 10 of the Commission's Rules and Regulations or judicial proceedings in this matter, other than a proceeding to enforce the terms of this Consent Order.

11. This Consent Order shall not constitute any admission of fact by Alarachi or determination of liability of Alarachi for the violations alleged in the Administrative Orders or this Consent Order.
12. By this Consent Order, the NBC does not waive any rights or remedies available to it for any violation by Alarachi of Federal or State laws or regulations not contained in the Administrative Orders or this Consent Order.
13. Nothing herein shall be construed to limit the authority of the NBC to undertake any action against any person, including without limitation Alarachi, in response to conditions which may present imminent and substantial endangerment to the public health, welfare or the environment.
14. Alarachi shall be responsible for all reasonable court costs and attorneys fees incurred by the NBC in collecting any outstanding penalties due under this Consent Order.
15. Any modification of this Consent Order shall be in writing and shall not take effect unless approved in writing by NBC and Alarachi.
16. If Alarachi fails to make any two consecutive payments by the due dates specified under this Consent Order, the entire balance shall become due and payable on the last day of the month following such failure.
17. This Consent Order shall terminate when Alarachi has complied with all the terms and conditions of this Consent Order as set forth herein, but in no event shall NBC be obligated to incorporate any term and/or condition within this Consent Order into a Permit renewal. NBC specifically reserves the right to issue, revise or renew any subsequent Wastewater Discharge Permit in accordance with NBC rules and regulations, without restriction.

**CONSENTED TO:**

**FOR MAZEY ALARACHI:**

  
Mazey Alarachi

9/9/10  
Date

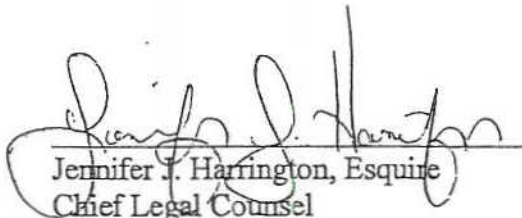
FOR THE NARRAGANSETT BAY COMMISSION:



Raymond J. Marshall, P.E.  
Executive Director  
Narragansett Bay Commission  
One Service Road  
Providence, RI 02905

9/16/10

Date



Jennifer J. Harrington, Esquire  
Chief Legal Counsel  
Narragansett Bay Commission  
One Service Road  
Providence, RI 02905

9/14/10

Date

CERTIFICATION

I hereby certify that on the 9<sup>th</sup> day of September, 2010, I executed the Consent Order in connection with Administrative Order #FP-01-09 and #FP-02-09. A copy of this order was given to me at the time of execution and I understand that the terms and conditions of this Consent Order are now in force and effect.

9/10/10

Date



Mazey Alarachi  
d/b/a Mazey's Restaurant

9/10/10

Date

Elaine Del Rossi  
Witness



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

401 • 461 • 8848  
401 • 461 • 6540 FAX  
TTY (RI RELAY OPERATOR) 711

<http://www.narrabay.com>



Vincent J. Mesolella  
Chairman

Raymond J. Marshall, P.E.  
Executive Director

June 15, 2010

Certified Mail – Return Receipt Requested  
Article No. 7009 1680 0000 7075 2646

James Martins  
540 Pawtucket Avenue  
Pawtucket, RI 02860

**Re: Administrative Order BV-01-10**

Dear Mr. Martins:

Enclosed please find Administrative Order #BV-01-10 issued to you by the Narragansett Bay Commission (NBC) for violating Rhode Island General Laws Title 46 (the Act) and the NBC's Rules and Regulations.

The NBC has assessed an administrative penalty of Five-Thousand Dollars (\$5,000) for violating the above mentioned laws and regulations to be paid within twenty-one (21) days of receipt of this order.

Pursuant to R.I.G.L. §46-25-25.4, §42-17.1-2(21) and the NBC's Rules and Regulations, you must preserve your right to hearing by filing a written request within ten (10) days of service to the NBC's Executive Director, Raymond Marshall, One Service Road, Providence, RI 02905. You may also request a status conference at this time.

If you should have any questions concerning this matter, please contact me at 461-8848 extension 420.

Very truly yours,

A handwritten signature in black ink, appearing to read "Jennifer J. Harrington Esq.", is written over the typed name.

Jennifer J. Harrington, Esq.  
Chief Legal Counsel

JJH/gjb  
Enclosure

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

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Vincent J. Mesolella  
Chairman

Raymond J. Marshall, P.E.  
Executive Director

## NARRAGANSETT BAY COMMISSION

### ADMINISTRATIVE ORDER #BV-01-10

IN THE MATTER OF:

COASTAL COLLISION  
& TOWING, INC.  
540 PAWTUCKET AVENUE  
PAWTUCKET, RI 02860

COMPLIANCE ORDER  
AND  
PENALTY ASSESSMENT

AND

JAMES MARTINS, PRESIDENT

### LEGAL AUTHORITY

The following findings are made and order issued pursuant to the authority vested in the Narragansett Bay Commission ("NBC") under Rhode Island General Laws (R.I.G.L.) Title 46 Chapter 25, the Narragansett Bay Commission Act ("Act") as amended. The Act established the NBC to acquire, plan, construct, extend, improve, operate and maintain the sewerage system and treatment facilities in the district. The Act authorizes the NBC to establish a sewage pretreatment program and to enforce any violations of the Act and any rule, regulation, permit or administrative order issued pursuant thereto.

R.I.G.L. § 46-25-25.2 prescribes that persons violating provisions § 46-25-25 through § 46-25-25.3 of the Act or of any permit, rule, regulation or order issued pursuant thereto shall be subject to a civil penalty of not more than twenty-five thousand (\$25,000) dollars per day for each violation and authorizes the NBC to obtain actual costs and reasonable attorney's fees incurred by the NBC in seeking compliance, penalties or damages. Furthermore, R.I.G.L. § 46-25-25.3 provides that any person found guilty of violating, willfully or with criminal negligence, any of the aforementioned provisions or of any permit, rule, or regulation issued pursuant thereto shall be punished by a fine of not more than twenty-five thousand (\$25,000) dollars and/or imprisonment of not more than one year for each enumerated violation. Administrative penalties are assessed based on the penalty matrix contained in the NBC Rules and Regulations Article 10.

## STATEMENT OF FACTS

1. Coastal Collision & Towing, Inc. ("Coastal Collision") is a Rhode Island corporation doing business in Pawtucket, Rhode Island which discharges process wastewater containing pollutants from floor washing and vehicle washing into the NBC's facilities.
2. Mr. James Martins is President and owner of Coastal Collision.
3. As part of its business, Coastal Collision washes vehicles. The wastewater generated from this activity is discharged to the NBC sewer system via an oil and solids/grit separation tank.
4. In accordance with the Act and the NBC's Rules and Regulations, the NBC issued Wastewater Discharge Permit #B9702-038-0211 (hereinafter the "Permit") to Coastal Collision and James Martins (collectively hereinafter "Permittee") on or about March 1, 2006 authorizing the Permittee to discharge wastewater generated from washing vehicles into the NBC's facilities. These conditions include, but are not limited to, wastewater discharge via an oil and solids/grit separation tank and such other conditions of its Permit and compliance with the NBC Rules and Regulations.
5. Pursuant to the terms of its Permit, Coastal Collision is required to sample for total oil and grease, lead and zinc.
6. On July 22, 2009, NBC issued Administrative Order BP-01-09 ("AO") to Coastal Collision and Towing, Inc. and James Martins for violation of its Permit and NBC Rules and Regulations. Specifically, Permittee was washing vehicles in the parking lot and allowing the wastewater to discharge to a catch basin located on Pawtucket Avenue. Permittee also failed to submit self-monitoring compliance reports as required by its Permit.
7. Pursuant to the terms of the AO, Coastal Collision was required to: immediately submit the Self Monitoring Compliance Report (SMCR) for August 2008; immediately submit the SMCR for February 2009; immediately cease and desist from washing vehicles in any area where the wastewater does not discharge to the oil and solid/grit separation tank approved in the Permit; in the event that Coastal Collision intends to cease vehicle washing operations, immediately submit written certification that said activity has ceased; immediately pay all outstanding NBC fees and assessments; and immediately comply with all terms and conditions of its Permit.
8. The AO provided that in the event that Coastal Collision did not comply with the provisions of the AO, an Administrative Penalty in the sum of Five Thousand Dollars (\$5,000) would be assessed against Permittee.
9. Upon receipt of the AO, Coastal Collision contacted NBC and complied with the provisions of the AO in a timely manner.

10. On December 23, 2009, NBC issued a letter to Coastal Collision acknowledging that Coastal Collision was in compliance with the provisions of the AO. This correspondence also reiterated that Permittee is obligated to comply with the provisions of its Permit.

11. Coastal Collision failed to submit a timely SMCR for February 2010 as required by its Permit.

12. On March 31, 2010, NBC issued a Notice of Violation for failure to submit the SMCR for the month of February 2010.

13. On April 15, 2010, NBC attempted to inspect Coastal Collision. At that time, employees for Coastal Collision were observed washing vehicles and allowing the wash water runoff to discharge onto Pawtucket Avenue, where it entered a catch basin.

14. Upon presenting identification and appropriate credentials, an NBC employee attempted to enter the premises to perform a further inspection. Coastal Collision denied NBC's employee access to the property for an inspection.

**THEREFORE, based on the above findings, Coastal Collision and James Martins are hereby notified of the following violations:**

**Violation A: Discharging wastewater in violation of the Wastewater Discharge Permit #B9702-038-0211.**

**Violation B: Failure to submit a timely Self-Monitoring Compliance Report for February 2010.**

**Violation C: Failure to allow NBC employees to enter Coastal Collision premises for inspection.**

**THE FOLLOWING LAWS AND REGULATIONS APPLY  
TO THE ABOVE VIOLATIONS:**

*(The citations listed below represent only selected excerpts from the referenced statutes, codes, rules and regulations. Actual documents should be consulted for complete texts.)*

**EPA - CODE OF FEDERAL REGULATIONS**

**40 CFR §403.2 Objectives of general pretreatment regulations**

By establishing the responsibilities of government and industry to implement National Pretreatment Standards this regulation fulfills three objectives:

- (a) To prevent the introduction of pollutants into POTWs which will interfere with the operation of a POTW, including interference with its use or disposal of municipal sludge;
- (b) To prevent the introduction of pollutants into POTWs which will pass through the treatment works or otherwise be incompatible with such works; and
- (c) To improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

**40 CFR §403.8 Pretreatment program requirements: Development and implementation by POTW.**

(f) *POTW pretreatment requirements.* A POTW pretreatment program must be based on the following legal authority and include the following procedures. These authorities and procedures shall at all times be fully and effectively exercised and implemented

(1) *Legal authority.* The POTW shall operate pursuant to legal authority enforceable in Federal, State or local courts ... At a minimum, this legal authority shall enable the POTW to:

(i) Deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the POTW by Industrial Users where such contributions do not meet applicable Pretreatment Standards and Requirements or where such contributions would cause the POTW to violate its NPDES permit;

(ii) Require compliance with applicable Pretreatment Standards and Requirements by Industrial Users;

(iii) Control through permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements. ... Such control mechanisms must be enforceable and contain, at a minimum, the following conditions:

(C) Effluent limits based on applicable general pretreatment standards in part 403 of this chapter, categorical pretreatment standards, local limits and State and local law;

(D) Self-monitoring, sampling, reporting, notification and record keeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment

standards in part 403 of this chapter, categorical pretreatment standards, local limits, and State and local law;

(iv) Require (A) the development of a compliance schedule by each Industrial User for the installation of technology required to meet applicable Pretreatment Standards and Requirements ...

(v) Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or noncompliance with applicable Pretreatment Standards and Requirements by Industrial Users. Representatives of the POTW shall be authorized to enter any premises of any Industrial User in which a Discharge source or treatment system is located or in which records are required to be kept under §403.12 (m) to assure compliance with Pretreatment Standards. Such authority shall be at least as extensive as the authority provided under section 308 of the Act;

(vi)(A) Obtain remedies for noncompliance by any Industrial User with any Pretreatment Standard and Requirement. All POTW's shall be able to seek injunctive relief for noncompliance by Industrial Users with Pretreatment Standards and Requirements. All POTW's shall also have authority to seek or assess civil or criminal penalties in at least the amount of \$1,000 a day for each violation by Industrial Users of Pretreatment Standards and Requirements....

(2) Procedures. The POTW shall develop and implement procedures to ensure compliance with the requirements of a Pretreatment Program.

(vii) ...an Industrial User is in significant noncompliance if its violation meets one or more of the following criteria:

(A) Chronic violations of wastewater discharge limits...

(B) Technical Review Criteria (TRC) violations...

(C) Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);

(D) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency

authority under paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge;

(E) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, or attaining final compliance;

(F) Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

(G) Failure to accurately report non-compliance;

(H) Any other violation or group of violations which the Control Authority determines will adversely affect the operation or implementation of the local pretreatment program.

#### GENERAL LAWS OF RHODE ISLAND

##### **General Powers: § 46-25-5:**

(9) To make assessments and impose reasonable and just user charges, and to pay for such expenses as may be required by law or as may be determined by the commission to be necessary for the maintenance and operation of the project...

(10) To establish a sewage pretreatment program, and to require as a condition, to the grant or reissuance of any approval, license, or permit required under the program, that the person applying for the approval, license, or permit, pay to the commission a reasonable fee based on the cost of reviewing and acting upon the application and based on the costs of implementing the program...

(16) To issue orders of general or specific applicability to carry out the purposes of the project.

(17) To have and exercise all powers necessary or convenient to effect its purposes.

(18) To impose administrative penalties in accordance with the provisions of § 46-25-25.4.

##### **Orders as to pretreatment of sewage: § 46-25-25:**

(a) Without limiting the generality of the foregoing, the authority hereby vested in the commission shall include the authority to limit, reject, or

prohibit any direct or indirect discharge of pollutants or combination of pollutants, as defined by applicable federal or state law, into the facilities of the project; to require that any person or class of user shall cause pollutants from his or her property, prior to their entry into the facilities of the project, to be submitted to such pretreatment standards and requirements as the commission may prescribe by rule or regulation. The commission shall prescribe such rules and regulations for pretreatment as in the opinion of the commission

- (1) Are required by applicable federal or state law,
- (2) Are required under the terms of the project's federal permit(s), or
- (3) Are necessary and appropriate for the project.

(b) The commission shall have the authority to issue or deny permits to any person for the direct or indirect discharge of any pollutants into the facilities of the project; to require the development of a compliance schedule by each person to insure compliance with such pretreatment as the commission may prescribe. No person shall discharge any pollutant into the facilities, except as in compliance with the provisions of this section, and any rules and regulations promulgated hereunder, and pursuant to the terms and conditions of a permit.

(c) The commission may, by regulation, order, permit, or otherwise require any person who discharges into the facilities of the project to:

- (1) Establish and maintain such records;
- (2) Make such reports;
- (3) Install, calibrate, use, and maintain such monitoring equipment or methods, including where appropriate, biological monitoring methods;
- (4) Sample such discharges and effluents, in accordance with such methods, at such locations, at such intervals, and in such manner as the commission shall prescribe; and
- (5) Provide such other information relating to discharges into the facilities of the project as the commission may reasonably require to insure compliance with prescribed pretreatment. The information shall include, but not be limited to, those records, reports, and procedures required by applicable federal law.

(d) Notwithstanding any other provision of this section, the commission shall have the authority, and shall prescribe the appropriate procedures, after



informal notice to the discharger, immediately and effectively to halt or prevent any discharge of pollutants into the facilities of the project which reasonably appears to present an imminent endangerment to the health or welfare of persons...

**Inspection powers: §46-25-25.1:**

(a) The commission is authorized to carry out all inspection, surveillance, and monitoring procedures necessary to determine, independent of information supplied by any person who discharges into the facilities of the project, compliance or noncompliance by the person with the pretreatment requirements prescribed by the commission.

(b) The commission or the duly authorized employees and agents of the commission, upon presenting identification and appropriate credentials, is authorized:

(1) To enter, without delay and at reasonable times, those premises (public or private) of any person or class of user, either receiving services from the commission or applying to services from the commission, in which a discharge source or treatment system is located or in which records required to be maintained pursuant to §46-25-25, are kept;

(2) During regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, to have access to and to copy any records, inspect any monitoring equipment or method required pursuant to §46-25-25, and sample any effluents which the owner or operator of the discharge source is required to sample under §46-25-25, and any rules and regulations adopted pursuant thereto.

**Civil penalties: §46-25-25.2:**

(a) Any person who shall violate the provisions of §§ 46-25-25 — 26-25-25.3, or of any permit, rule, regulation, or order issued pursuant thereto, shall be subject to a civil penalty of not more than twenty-five thousand dollars (\$25,000) per day for each violation.

(b) The commission shall, in the same manner as cities and towns authorized under the provisions of §45-6-2.3(4), issue regulations to obtain actual costs and reasonable attorney's fees incurred by the commission in seeking compliance, penalties, or damages.

**Enforcement authority and procedure: § 46-25-25.4:**

(a) The commission shall have authority to seek legal or equitable relief in the federal court or in the superior court of Providence county to enforce the

requirements of §§ 307(b) and (c), 402(b)(8) and other applicable sections of the Federal Water Pollution Control Act, also known as the Clean Water Act, 33 U.S.C. § 1251 et seq., and any regulations implementing those sections or authorized by this chapter and/or by chapter 12 of this title. Whenever, on the basis of any information available to the commission, the commission has reasonable grounds to believe that a person has violated any provision of §§ 46-25-25 through 46-25-25.6 or any permit, rule, regulation or order issued pursuant thereto the commission may institute administrative, civil or criminal proceedings in the name of the commission. The commission shall not be required to enter into any recognizance or to give surety for costs prior to instituting such proceedings. The commission has the authority to order any person who violates any provision of §§ 46-25-25 through 46-25-25.6, any permit, rule, regulation or order issued pursuant thereto to cease and desist the violation, or to remedy the violation and to impose administrative penalties.

**RULES AND REGULATIONS FOR THE USE OF  
WASTEWATER FACILITIES WITHIN NARRAGANSETT BAY  
COMMISSION**

**ARTICLE 5-DISCHARGE REQUIREMENTS, LIMITATIONS,  
AND PROHIBITIONS**

**5.1 Authority**

The NBC may limit, reject or prohibit any direct or indirect discharge of pollutants or combination of pollutants, as defined by applicable Federal or state law or as described below, into the facilities. The NBC may, in its discretion, affix labels to those tanks which contain substances which are prohibited from being discharged to the facilities or which may not be discharged to the facilities without adequate pretreatment.

**5.2 General Discharge Limitations and Prohibitions**

In addition to those limitations and prohibitions specified in paragraphs 5.3, 5.4, 5.5 and 5.6 below, no person shall discharge or cause or allow to be discharged directly or indirectly into the facilities any other substances, water or wastewater that either singly or by interaction with other substances will or is likely to:

A. Interfere with the operation of the facilities by:

- 1) harming either the sewerage system or wastewater treatment process;
- 2) being otherwise incompatible with the treatment process; or
- 3) contaminating the sludge or contributing to sludge disposal problems; or

- B. Violate applicable Federal or State law, including Federal or State hazardous waste regulations, or the terms of the facility's Federal and State permits, including but not limited to, the NBC's Rhode Island Pollution Discharge Elimination System (RIPDES) Permits; or
- C. Endanger the environment by adversely affecting receiving waters or otherwise; or
- D. Endanger the health or welfare of persons.

#### 5.6 Specific Discharge Prohibitions:

Certain substances are specifically prohibited from being discharged into the NBC's facilities. These prohibited substances include, but are not limited to, the following:

- A. Groundwater, stormwater, and surface waters, roof runoff, tidewater, subsurface drainage, noncontact cooling water, and uncontaminated industrial process waters, unless approved by the Commission. (See Article 4)
- B. Slugs as defined in Article 2.
- C. Sludge or deposited solids of any type, including but not limited to, those generated from an industrial or commercial pretreatment process (e.g., hydroxide or degreaser sludge).
- D. Concentrated discharges as defined in Article 2.
- E. Batch discharges as defined in Article 2 unless prior written approval is granted from the Commission.
- F. Any material identified as hazardous waste according to 40 CFR Part 261 except as may be specifically authorized by the NBC.
- G. Any wastewater having a lethal concentration of fifty percent (LC50) as determined by a toxicity test of 96 hours or less using 100% of the Industrial User's discharge and aquatic test species chosen by the NBC.
- H. Gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquids, solids, or gases.
- I. Any substances which by reason of their nature or quantity may create a fire or explosion hazard in the NBC's facilities or be injurious to NBC personnel or to the operation of the NBC's facilities including, but not

limited to, waste streams with a closed cup flash point of less than 60 degrees Centigrade (140 degrees Fahrenheit) using the test methods specified in 40 CFR 261.21.

- J. Any solid or viscous pollutants in amounts which may cause obstruction to the flow in a sewer or may result in Interference with the operation of the waste treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch (1/2") in any dimension, or any material which can be disposed of as trash, ashes, bones, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, underground garbage, whole blood, hair and fleshings, entrails, paper or Styrofoam dishes, cups, milk containers, lime slurries, and grease from deep-frying operations.
- K. Any trucked or hauled pollutants except at discharge points designated by the NBC.
- L. Black boils, pickling solutions, acids etches, acid activators, and brite dip acids.
- M. Solvents in concentrations exceeding the NBC discharge limitation specified in Article 5.4. Solvents include, but not limited to, trichloroethane, trichloroethylene, xylene, Freon, paint thinners and strippers.
- N. Cyanide, acid, or solvent-based stripping solutions.
- O. Concentrated plating baths or solutions.
- P. Waste oils.
- Q. Isolation Wastes or Regulated Medical Waste (See definitions under Article 2).
- R. Any substance which may cause a public nuisance, cause hazard to life or prevent entry into the sewers for maintenance or repair.
- S. Concentrated dyes and pigments that have not been thoroughly exhausted through the coloring process and colored wastewater in concentrations that would cause discoloration of the influent to the NBC wastewater treatment facilities.

## 5.9 Remedies

If any wastewater is discharged or is proposed to be discharged to the wastewater facilities in violation of the limitations or prohibitions described in Article 5, the NBC may in its sole discretion:

- A. Reject the wastes;
- B. Require a discharger to demonstrate and implement those in-plant modifications which will reduce or eliminate the discharge of such substances to conform with these Rules and Regulations;
- C. Require pretreatment, including storage facilities or flow equalization necessary to reduce or eliminate the objectionable characteristics or substances, so that the discharge will not violate these Rules and Regulations;
- D. Require controls to be installed which will regulate the quantities and rates of discharge;
- E. Require surcharge payments to be made to the NBC to cover its added cost of handling, monitoring, and treating the wastes which exceed threshold values in accordance with rates set and approved by the Public Utilities Commission;
- F. Revoke a discharger's permit; and
- G. Take any other administrative sanctions, enforcement actions, and remedial actions as may be desirable, necessary, or permitted to achieve the purpose of these Rules and Regulations.

## ARTICLE 7-INSPECTION POWERS

### 7.1 General Powers

Inspections shall be conducted at the discretion of the NBC. Duly authorized employees and agents of the NBC, upon presenting identification and appropriate credentials, are authorized:

- A. To enter without delay and at reasonable times those premises (public or private) of any person or class of user either receiving services from the NBC or applying for services from the NBC in which a discharge source or treatment system is located or which records required to be maintained pursuant to R.I.G.L. §46-25-25 are kept;

- B. During regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, to have access to and to copy any records, inspect any monitoring equipment or method required pursuant to R.I.G.L. §46-25-25 and sample and/or analyze any effluents which the owner or operator of such discharge source is required to sample and/or analyze under R.I.G.L. §46-25-25 and any rules and regulations adopted pursuant thereto; and
- C. During such on site inspections, to carry out all inspections, surveillance, and monitoring procedures necessary to determine, independent of information supplied by any person discharging into the facilities, compliance or noncompliance with NBC pretreatment requirements.

## 7.2 User Documentation

The NBC may, by regulation, order, permit, or otherwise, require any person who discharges into the facilities to:

- A. establish and maintain records;
- B. make reports;
- C. install, calibrate, use and maintain monitoring equipment or methods (including where appropriate, biological monitoring methods);
- D. sample and/or analyze discharges and effluents (in accordance with the method, at the locations, at the intervals, and in the manner as the NBC shall prescribe); and/or
- E. provide other information relating to discharges into the facilities of the project as the NBC may reasonably require to ensure compliance with prescribed pretreatment. Such information shall include, but not be limited to, those records, reports and procedures required by applicable State and Federal law.

## ARTICLE 8-WASTEWATER DISCHARGE PERMIT SYSTEM

### 8.2 Compliance Required

No permit holder shall discharge industrial wastewater in excess of the quantity, rate of discharge, concentrations or any other limits specified in the permit. Any person desiring to modify his or her permit must first apply for an amended permit.

## 8.5 Permit Conditions

Wastewater discharge permits shall be expressly subject to specific permit provisions contained therein as well as to provisions of these Rules and Regulations and all other regulations, user charges and fees established by the NBC. Wastewater discharge permits may include such conditions as are reasonably deemed necessary by the NBC to prevent Pass Through or Interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal, protect ambient air quality, and protect against damage to the NBC's facilities. Such conditions may include, but are not limited to, the following:

- A. The average and maximum wastewater constituents and characteristics permitted in the process water discharges;
- B. Limits on rate and time of discharge or requirements for flow regulation and equalization;
- C. Requirements for installation of inspection and sampling facilities and specifications for self-monitoring;
- D. Requirements for the submission of periodic self-monitoring compliance reports which shall include, but not be limited to, volume or rates of flow, concentrations of controlled pollutants or other information which relates to the generation of waste;
- E. Requirements for maintaining and submitting technical reports and plant records relating to wastewater discharges;
- F. Daily average and daily maximum discharge rates, or other appropriate conditions when pollutants subject to limitations and prohibitions are proposed or present in the user's wastewater discharge permit;
- G. Compliance schedules;
- H. Requirements for installation of pretreatment systems, spill and slug-prevention control plans and solvent-management plans;
- I. Provisions for authorized NBC employees and agents to enter and inspect the premises, including provisions for copying records, inspecting monitoring equipment and sampling effluent;
- J. Compliance with Federal, state and other governmental laws, rules and regulations;
- K. Fees and costs including supplemental fees assessed because of the special nature of the user's effluent in accordance with the provisions of Article 5

and additional costs and fees based on the costs of enforcing these regulations or the permit, as in accordance with R.I.G.L. §46-25-5 (j);

- L. Signatory requirements; and
- M. Any other reasonable conditions necessary to ensure compliance with the provisions of R.I.G.L. §46-25-1 et seq., or any state and Federal laws, rules and regulations.

## **8.6 General Pretreatment Requirements**

Users shall provide wastewater treatment as required to comply with these Rules and Regulations, and shall achieve compliance with all Federal, state, and NBC pretreatment standards within the time limitations specified by the Federal, State, and NBC pretreatment regulations. Any equipment or systems required to pretreat wastewater to a level acceptable to the NBC shall be provided, operated and maintained at the user's expense. The user is responsible for following all equipment instructions provided by the manufacturer. Detailed plans showing the pretreatment equipment, systems and operating procedures shall be submitted to the NBC for review and shall be acceptable to the NBC prior to construction and operation of the facilities. The design of industrial process wastewater treatment systems must be executed in accordance with the general laws of the State of Rhode Island (1956, as amended) Title 5, Chapter 8. The following paragraphs set out the minimum requirements for pretreatment and water using process plans. The NBC may require additional documentation and/or detail of plans whenever it determines that such information is necessary to evaluate the pretreatment system or process operations.

Any review and inspection conducted by the NBC is for the sole purpose of determining compliance with the technical provisions of these Regulations. The NBC does not assume responsibility for means, methods or techniques used, or for the safety of construction work, the site, or for compliance by users with applicable laws and regulations other than this Regulation.

Review by the NBC does not constitute any form of guarantee or insurance with respect to the performance of the equipment and processes. The review of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the equipment as necessary to produce an effluent acceptable to the NBC under the provisions of this section. Any subsequent significant changes in the pretreatment equipment or method of operation shall be reported to and be acceptable to the NBC prior to the user's initiation of the changes.



## ARTICLE 9-WASTEWATER MONITORING AND REPORTING

### 9.3 Monitoring And Analysis of Process Wastewater

Sampling and analysis of industrial wastewater for the purpose of compliance determinations with respect to Article 5 prohibitions and limitations shall be done through industry self-monitoring and through monitoring done by the NBC. All analyses, including sampling results submitted in support of any application reports, evidence or required by any permit or order shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto or, if 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, in accordance with procedures approved by EPA. The NBC may, at its discretion, require an independent laboratory to conduct the sampling and analysis at the user's own cost.

#### A. Self-Monitoring Requirements:

- 1) Self-monitoring results must be accompanied by a certified laboratory analysis sheet, indicating the EPA approved test procedure for each parameter analyzed. The user must also submit a self-monitoring report with the results on a form prescribed by the NBC.
- 2) All Self-Monitoring Reports must be signed and certified in accordance with Section 9.10 below.
- 3) If any sampling performed by a user indicates any violation(s) of discharge limitations, the user shall notify the NBC within twenty-four (24) hours of becoming aware of the violation(s). The user shall repeat the analysis immediately for the parameters determined to be in violation and submit the resampling results to the NBC within thirty (30) days after becoming aware of the violation(s).

### 9.7 Periodic Compliance Reports

- A. Any significant industrial user subject to a pretreatment standard shall, at a frequency determined by the NBC but in no case less than twice per year, submit a report indicating the nature and concentration of pollutants in the discharge which are limited by such pretreatment standards and the measured or estimated average and maximum daily flows for the reporting period. All periodic compliance reports must be signed and certified in accordance with Section 9.10 below.
- B. All wastewater samples must be representative of the user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that analytical results are not representative of its discharge.

- C. If a user subject to the reporting requirement in and of this Section monitors any pollutant more frequently than required by the NBC, using the procedures prescribed in Section 9.3 (B) of these Rules and Regulations, the results of this monitoring shall be included in the report.

#### 9.8 Notification/Reporting Requirements

**A. Report of Changed Conditions**

Users are required to submit written notification to the Commission in advance of any substantial change to the user's pretreatment operations or system which might alter the nature, quality or volume of its wastewater at least thirty (30) days prior to instituting any such change, including the listed or characteristic hazardous wastes for which the user has submitted initial notification under 40 CFR 403.12(p).

**B. Sampling Violations**

If sampling performed by a user indicates a violation of discharge limitations, the user must notify the NBC within twenty-four hours (24) hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the NBC within thirty (30) days after becoming aware of the violation.

#### ORDER

**THEREFORE**, based on the above findings and violations, Coastal Collision and Towing, Inc. and James Martins are hereby ORDERED to:

1. Immediately submit the self-monitoring compliance report for February 2009.
2. Immediately cease and desist from washing vehicles in any area where the wastewater does not discharge to the oil and solid/grit separation tank approved in the Permit.
3. Immediately comply with all terms and conditions of Wastewater Discharge Permit #B9702-038-0211.
4. Prepare and implement policies and procedures for washing vehicles. Policies and procedures shall include all conditions and requirements set forth in Wastewater Discharge Permit #B9702-038-0211.
5. Prepare and implement policies and procedures for allowing NBC employees access to Coastal Collision's property as required by Section H of Wastewater Discharge Permit #B9702-038-0211.

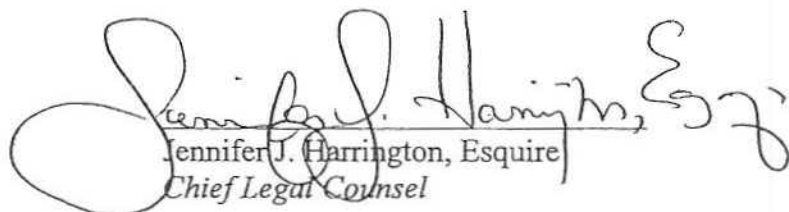
6. Within 21 days of the date of this Administrative Order, provide a written compliance report to NBC confirming that all employees have been provided with its policies and procedures prepared in compliance with paragraphs 5 and 6 of this Order. Said compliance report shall also confirm that all employees have been adequately trained to comply with these policies and procedures and all future employees will be trained upon hire.
7. Within 21 days of the date of this Administrative Order, pay an Administrative Penalty to NBC in the amount of Five Thousand Dollars (\$5,000).

Pursuant to R.I.G.L. § 46-25-25(4) and § 42-17.1-2(21) and Article 10 of the NBC's Rules and Regulations, Coastal Collision and James Martins have the right to file a written request with the Executive Director for a hearing on said alleged violations within ten (10) days of service of this notice to show cause why they should not be found in violation of the NBC's Rules and Regulations and why enforcement action should not be taken against them. If a hearing is requested within the ten (10) day time period, the Commission shall provide written notice to Coastal Collision and James Martins of the date, time and place for the hearing. If Coastal Collision and James Martins fail to request a hearing within the aforementioned time frame, this Order shall automatically become an immediate compliance order and Coastal Collision and James Martins shall be deemed to have waived their right to an adjudicatory hearing on the above cited violations.

**IF COASTAL COLLISION AND JAMES MARTINS WAIVE THEIR RIGHT TO AN ADMINISTRATIVE HEARING WITHIN TEN (10) DAYS, COASTAL COLLISION AND JAMES MARTINS ARE DEEMED TO BE IN DEFAULT AND THE COMMISSION WILL IMMEDIATELY TAKE STEPS TO PREVENT ANY FURTHER FLOW FROM ENTERING THE FACILITIES. SAID STEPS MAY INCLUDE, BUT ARE NOT LIMITED TO, SEALING AND/OR PLUGGING OF THE CONNECTION AT THE POINT OF COASTAL COLLISION' CONNECTION TO THE FACILITIES. THE EXECUTIVE DIRECTOR OR HIS DESIGNEE MAY FOR GOOD CAUSE SHOWN DEFER ANY OF THE COMPLIANCE DATES PRESCRIBED HEREIN. BE ADVISED THAT FAILURE TO COMPLY WITH THE TERMS OF THIS ORDER MAY SUBJECT COASTAL COLLISION AND JAMES MARTINS TO CIVIL AND/OR CRIMINAL PENALTIES OF UP TO \$25,000 PER DAY PER VIOLATION PURSUANT TO R.I.G.L. § 46-25-25.2 AND § 46-25-25.3.**

FOR THE COMMISSION:

6-15-10  
Date

  
Jennifer J. Harrington, Esquire  
Chief Legal Counsel

CERTIFICATION

I hereby certify that on the 15<sup>th</sup> of June, 2010, true and accurate copies of the within ADMINISTRATIVE ORDER AND ASSESSMENT OF PENALTY were sent by certified mail, return receipt requested to the following individual:

James Martins, President  
Coastal Collision and Towing Inc.  
540 Pawtucket Avenue  
Pawtucket, RI 02860

James Martins  
540 Pawtucket Avenue  
Pawtucket, RI 02860

6-15-10  
Date

Gloria J. Borino  
Gloria J. Borino  
Executive Paralegal