

PRETREATMENT PROGRAM  
**ANNUAL REPORT**

JANUARY 1, 2013 - DECEMBER 31, 2013



**ATTACHMENT VOLUME I**

**NBC AND PRETREATMENT PROGRAM  
SPECIFIC INFORMATION**

***ATTACHMENT VOLUME I***  
***NARRAGANSETT BAY COMMISSION***  
***AND***  
***PRETREATMENT PROGRAM***  
***SPECIFIC INFORMATION***

**LISTING OF ATTACHMENT SECTIONS  
ATTACHMENT VOLUME I**

**NBC AND PRETREATMENT PROGRAM  
SPECIFIC INFORMATION**

<b><u>SECTION #</u></b>	<b><u>TITLE</u></b>
1	NBC Public Information – Mailings, Newspaper Articles, Public Notices, Press Releases, Newsletters, and Educational Documents
2	Typical NBC Wastewater Discharge Permits
3	Various Pretreatment Program Documents ~ Spill and Slug Prevention Control Plan Guidance Document ~ Toxic Organic / Solvent Management Plan Guidance Document ~ Significant Industrial User Annual Inspection Checklist ~ NBC Sampling, Reporting, and Chain of Custody Forms
4	Sample Enforcement Letters, Notices, and Orders

***ATTACHMENT VOLUME I***

***SECTION 1***

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

***INFORMATIONAL LETTERS TO  
USERS***



March 1, 2013



## 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 2012, 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.  
AG&G Incorporated  
Austin Metal Finishing, Inc.  
Darlene Group, Inc.  
Eastern Color & Chemical Company  
Electrolizing, Inc.  
General Cable Industries, LLC  
Impco, Inc.  
Induplate, LLC  
Mahr Federal, Inc.

Metallurgical Solutions, Inc.  
Pilgrim Screw Corporation  
Providence Journal Company - Production Facility  
Providence Metallizing Company, Inc.  
Stackbin Corporation  
Tanury Industries PVD, Inc.  
Technodic, Inc.  
Truex, Inc.  
Univar USA, Inc.

An advertisement recognizing the achievements of these companies was published in the Providence Journal on February 27, 2013. 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 2012*

**The Narragansett Bay Commission recognizes these Significant Industrial User companies for perfect regulatory compliance with Pretreatment Program regulations during 2012:**

A. Harrison & Company, Inc.	AG&G Incorporated
Austin Metal Finishing, Inc.	Darlene Group, Inc.
Eastern Color & Chemical Company	Electrolizing, Inc.
General Cable Industries, LLC	Impco, Inc.
Induplate, LLC	Mahr Federal, Inc.
Metallurgical Solutions, Inc.	Pilgrim Screw Corporation
Providence Journal Company - Production Facility	Providence Metallizing Company, Inc.
Tanury Industries, PVD, Inc.	Stackbin Corporation
Truex, Inc.	Technodic, Inc.
	Univar USA, 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 401-461-8242 • [www.narrabay.com](http://www.narrabay.com)

March 6, 2013



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

Dear «Title» «Last\_Name»:

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 2012, 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 2013. 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 black ink, appearing to read "Kerry M. Britt". The signature is written in a cursive style with a large initial "K".

Kerry M. Britt  
Pretreatment Manager

KMB:smb

cc: Pretreatment Engineers/Technicians

March 7, 2013



**ENVIRONMENTAL MERIT AWARDS**  
**Mass Mailing – All Users – Both Districts**  
**List Attached**

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

The Narragansett Bay Commission (NBC) is proud to announce its nineteenth 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/ProgramsAndProjects/PretreatmentProgram/Environmental%20Merit%20Awards.aspx>

Please download the application and return it by April 1, 2013 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

March 19, 2013



**MASS MAILING  
2012 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 27, 2013 as being in SNC with NBC or EPA regulations for the reporting period of October 1, 2011 through December 31, 2012. 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 21, 2012 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 \$240.00 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 19, 2013. (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: Leah Foster  
Mark McGuire, Esq.

March 20, 2013



## **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 27, 2013, the names of eleven (11) 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 2014 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 2013.

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</u> <u>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.

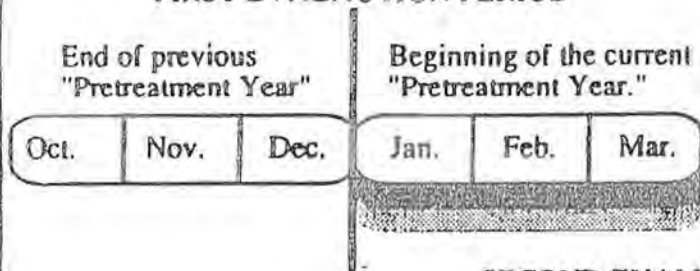
**SNC Criteria H** Any violation that adversely effects the operation or implementation of the pretreatment program.

**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.

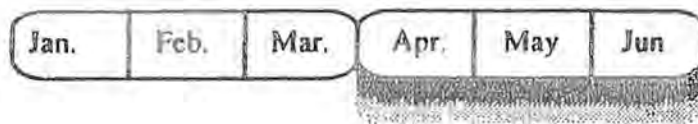
## Determination of Industrial User (IU) Significant Noncompliance (SNC)

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 EVALAUTION PERIOD



### SECOND EVALUATION PERIOD



### THIRD EVALUATION PERIOD



### FOURTH EVALUATION PERIOD



End of the current "Pretreatment Year."

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

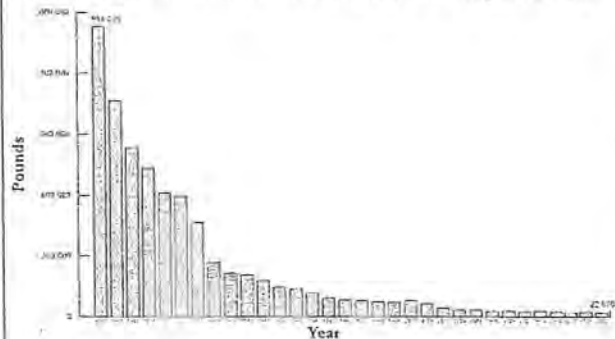


THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 C.F.R. 403.8(f) (2) (vi) and Article 10 of the Narragansett Bay Commission Rules and Regulations require the NBC to publish annually the names of all industrial users in Significant Non-Compliance (SNC) with pretreatment standards and other 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 one period from October 1, 2011 through December 31, 2012. 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, fuel 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, 1981-2012**



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

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 at 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 DEH 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 401-884-8848/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 954,079 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 97.6% and 98.6% 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
Aspet Aerogels Rhode Island, LLC	Failure to submit reports on time (6)	Reports have been received.
Cumberland		
Teknicore, Inc.	Zinc (2) Failure to submit reports on time (6)	Firm is now in compliance. Reports have been received.
Precision Dermatology	Total Oil & Grease (1,2)	Firm is now in compliance.
Nazzo Composite Stone Enterprises, Inc.	Failure to submit report on time (6)	Report has been received.
Lincoln		
Danaon Pharmaceuticals, Inc.	Total Toxic Organics (2) Zinc (2)	Firm is now in compliance.
Chemart Company	Silver (2)	Firm is now in compliance.
Pawtucket		
New England Laces Supply Company, Inc.	Total Oil & Grease (2)	Firm is now in compliance.

**Field's Point Service Area**

Johnston		
Company Name	Violations Cited	Present Status
Unique Plating, Inc.	Nickel (2)	Firm is now in compliance.
Providence		
Aluminum & Copper Recycling, Inc.	Failure to submit reports on time (6)	Reports have been received.
Bella's Jewelry	Failure to submit report on time (6)	Report has not been received.
Mark Precision, Inc.	Failure to submit report on time (6)	Report has been received.

The Narragansett Bay Commission will continue to lead in wastewater treatment, environmental protection, and environmental education to ensure a cleaner Narragansett Bay for all to enjoy.

Vincent J. Mesolella, Chairman • Raymond J. Macshall, 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)

NOTICE OF VIOLATION  
LETTER OF DEFICIENCY



April 23, 2013

**2<sup>ND</sup> NOTICE FOR SNC LETTER  
LIST ATTACHED**

**Certified Mail**  
**Return Receipt Requested**

Dear «Title» «LastName»:

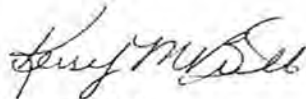
As of April 23, 2013, our records indicate that your firm has an outstanding balance of \$240.00 for reimbursement of the Narragansett Bay Commission (NBC) Public Notice placed in the Providence Journal on February 27, 2013, for your firm being listed in Significant Non-Compliance.

Please be advised that this balance must be paid within five (5) days of receipt of this letter. **Please make checks payable to the Narragansett Bay Commission and deliver to NBC Pretreatment Section, 2 Ernest Street, Providence, RI 02905.** (Please do not send check to customer service with your pretreatment fee or consumption payment as this will result in billing errors.)

Please note that this is the second notice requesting payment. Failure to make payment within the timeframe specified will result in referral of this matter to the NBC Enforcement Section for collection and may result in the initiation of enforcement action against your firm. Please note that the NBC can assess administrative penalties of up to \$25,000 per violation per day should an enforcement action be initiated. Your prompt attention to this matter is appreciated.

If you have any questions regarding this matter, please contact Sulema Martinez at 461-8848, ext. 490.

Sincerely,



Kerry M. Britt  
Pretreatment Manager

KMB:sm

Enclosure

INVOICE DATE: 04/23/13

**BILL TO:**

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

BILLING ADDRESS: «Address1», «City», «State» 0«PostalCode»

DATE	DESCRIPTION	TOTAL
SECOND NOTICE	Reimbursement for Significant Non-Compliance Public Notice published February 27, 2013	\$240.00
	<b>Total Amount Due</b>	<b>\$240.00</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		
<b>SECOND NOTICE</b>		
*Reimbursement SNC Public Notice Ad published 02-27-13		
	Total Amount Due	Amount Enclosed
	\$240.00*	

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

June 10, 2013



**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 black ink, appearing to read "Nathan J. Dean".

Nathan J. Dean  
Assistant Pretreatment Manager

Enclosure



# 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*



November 19, 2013



## MASS MAILING

Fuel Oil Users

List Attached

Dear :

As you know the heating season is here. 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,

Kerry M. Britt  
Pretreatment Manager

cc: PT Engineers/Technicians

December 3, 2013



**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 black ink, appearing to read "Kerry M. Britt".

Kerry M. Britt  
Pretreatment Manager

KMB:smb

Enclosure

cc: Pretreatment Engineers and Technicians



# 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:

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- 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;
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*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. Mesoella, *Chairman*

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



December 26, 2013

SEPTAGE HAULERS  
FEE PAY STICKER LETTER 2014

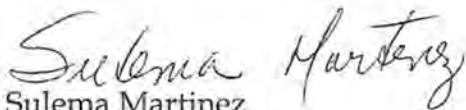
Permit Number: «PERMIT\_NUMBER»

Dear «TITLE» «LASTNAME»:

Enclosed please find «NUMBER» 2014 Narragansett Bay Commission (NBC) permitted Septage Hauler Identification Sticker(s). Effective January 2, 2014, 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  
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## Providence Hit with \$1.3M in Unpaid Police Details

[Email to a friend](#) [Permalink](#)



Friday, January 25, 2013

Stephen Beale, GoLocalProv News Contributor



Providence is owed \$1.3 million in past due payments for police details by businesses and other institutions, at a time when the city is facing a potential \$15 million budget deficit, city records show.

GoLocalProv first reported that the city had significant delinquencies in police detail payments in June 2011, when the city was still in the throes of its budget crisis. The following year, the city council passed an ordinance mandating that any companies

60 days or more overdue provide evidence that they had entered into a payment plan before they could obtain any permits, licenses, renewals, or new police details.

Despite the ordinance, the actual delinquent amount is up by about a third of a million from where it was two years ago. The delinquencies include owed payments for police, as well as some fire details.

Overall, nearly one hundred and fifty companies are more than 30 days behind on payments, including companies like Verizon and 7-Eleven, city nightclubs like Colosseum and the Monet Lounge, a host of local construction companies, and a number of nonprofit community and cultural associations. The most delinquent institution is the Narragansett Bay Commission, a quasi-public state agency, which owes about \$300,000 in past due payments. National Grid ranks second, owing nearly \$100,000.

Nearly one hundred bills are more than 120 days late, totaling \$656,000, as of December 2012.

City councilman calls for better enforcement

City Councilman Michael Correia, the author of the ordinance targeted at delinquencies, says he is pleased with the progress the city has made in enforcing police detail payments over the last year. He says the city has improved its collections rate from a dramatically low level before the ordinance passed to a current rate between 75 percent and 80 percent.

"I do have to say I am extremely satisfied with the collection rate and the progress we have made within the last year on this," Correia said. "Like any system, nothing is perfect."

He says the city can—and should—do more.



"We need to do a better job of enforcement," Correia added. "We still need to tighten up a few things on the communication part."

In particular, he said the city Controller's office needs to improve its communication with the detail office in the Police Department. Likewise, there needs to be better coordination between the Controller and the various city departments that issues licenses and permits, Correia said.

One million dollars is no small amount for any city, especially one that is not quite out of the woods when it comes to its fiscal problems. Although the days when the

**Business Monday**  
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### Most Popular Articles

Today

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1 NEW: Julie Tremmel Out at WJAR 10

2 The Highest Paid Superintendents in RI

3 RI's CVS Responds to Saturday Night Live Parody Sketch

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5 The Top 30 Highest Paid State Contractors in RI

Last 30 days



ALEX AND ANI

SHOW



SOME



LOVE



city was veering towards bankruptcy appear to be behind it, the budget deficit has proved hard to kill, with

Providence still saddled with a \$15.2 million possible shortfall for the current year, according to a preliminary estimate based on a cursory analysis conducted by Internal Auditor Matt Clarkin.

In that context, ramping up collections on police details could wipe out a significant chunk of that deficit, Correia noted. "Every nickel and dime helps to bring this deficit down," he said.

Companies say they are doing best to keep up

Some of the most delinquent companies did not dispute the city records, saying they are doing their best to keep up with their bills for police details and describing the delinquency as more of an accounting issue than anything else.

The top payer on the list, the Narragansett Bay Commission, is currently using police details for about \$220 million worth of construction work scattered over a dozen sites in the City of Providence, according to spokesperson Jamie Samons. The work is part of the second phase of the Combined Sewer Overflow Project, meant to cut pollution in Narragansett Bay.

So far, over the past 12 months, the commission has already issued \$1.4 million in payments to the city for police details. Samons noted that this month the agency has issued two checks to Providence, totaling \$108,022. A third check is scheduled to be cut on Feb. 11 in the amount of \$227,323, according to Samons.

"As you can see the police details is a substantial part of our construction cost," she said. "So we're continually paying our invoices."

She added that the CSO project is funded through borrowed funds, which could be another factor in possible delays in payments, since the checks to the city are issued by a third party trustee of the debt, which is U.S. Bank.

A regional spokesman for National Grid, David Graves, said he is not aware of any disputes over billing with the city. He indicated that his company is doing its best to keep up with the bills as well, noting that in Rhode Island alone National Grid manages hundreds of work sites. Graves also noted that National Grid switched to a new accounting system last November, which could be causing delays in processing payments.

City forgives most of detail cost for WaterFire

City records indicate that the second most delinquent account is actually WaterFire, at about \$98,000. But the nonprofit organization has had a long-standing arrangement with the city that it would contribute just \$25,000 towards its annual police detail costs, with the city eating the rest of the tab. That arrangement is currently spelled out in a five-year contract reached with the city last August, according to the Internal Auditor's office and representatives of WaterFire.

In 2012, that meant that WaterFire paid \$25,000 while the city shouldered the remaining \$35,000, according to documents from the Internal Auditor.



Under the terms of the contract, WaterFire isn't really delinquent—even though the city accounting system still logs their account as delinquent and continues to send them the bills for the amounts, according to Barnaby Evans, the executive artistic director, and Peter Mello, the managing director.

"It shows on paper, but we're entirely paid up," Evans said.

"We're a debt-free organization," Mello added.

But Correia says that, if given the opportunity, the city should consider renegotiating the terms of the contract, flipping the arrangement so that the city would chip in a flat \$25,000 with WaterFire responsible for the rest.

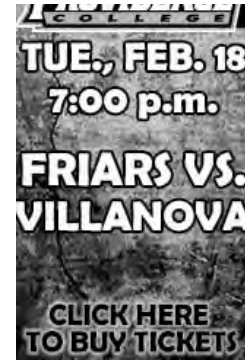
"WaterFire is a very important thing that happens here in the city, but we really need to look at what it's costing the taxpayers of the city," Correia said.

Correia said the city could use the saved funds elsewhere, especially at a time when the budget is tight and manpower is down. "I would rather be spending this money on overtime in my neighborhood," Correia said.

WaterFire economic benefit touted

Evans said that when the \$25,000 flat-fee was originally negotiated, the amount covered the bulk of the annual cost. He said it was the city's decision to bump up manpower and extend hours in recent years, while WaterFire hasn't added any events. And the \$25,000 figure doesn't include payments for other permits WaterFire makes to the city. In all, the organization makes about \$32,000 to \$33,000 in payments to Providence.

But the city also forgives other payments that would normally be required and makes other in-kind



Featured listings brought to you by: **BANKRI** BANKRHODEISLAND.COM

Sort Direction   
2061 FRENCHTOWN RD  
East Greenwich, RI

contributions to WaterFire.

The total value of forgiven payments and in-kind donations—including parks maintenance and permits, police details, traffic engineering, and public works maintenance—comes out to \$146,680 for 2012, according to an analysis by the Internal Auditor's office. Over the five-year period of the new contract, that would amount to a cost of \$763,328 for the city.

Of course, such figures do not take into account the economic benefit WaterFire brings to the city, or the specific amount in tax revenues that stems from the economic activity it engenders. Clarkin said his office has not done a study of the economic value of WaterFire and would likely need to partner with state officials in order to do one.

But Evans and Mello pointed to a 2004 economic impact study done by the University of Rhode Island which showed that WaterFire generates \$70 million in economic activity for the state, once the figures are adjusted for inflation. That translates into 531 jobs and \$5 million in tax revenues for both the city and the state, according to Mello.

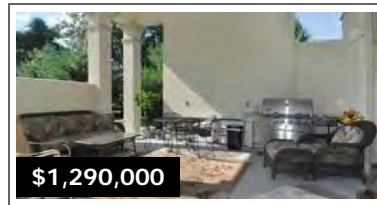
*If you valued this article, please LIKE GoLocalProv.com on Facebook by clicking [HERE](#).*



4 Beds 4 Baths 4988 sqft

[View Listing Details](#)

### 105 HOWLAND RD East Greenwich, RI



4 Beds 4 Baths 6618 sqft

[View Listing Details](#)

Previous 1 2 3 4 5 Next

Online **Interactive** Weather Tool

## Internet Explorer webpage

What you can try:

It appears you are disconnected. Please reconnect to the Internet.



## Providence Police Details - Top 30 Delinquencies

Company Name	30 or More Days Late
<i>Business and Government Organizations</i>	
Narragansett Bay Commission	\$295,011
National Grid	\$96,548
Providence Public Works	\$75,499
Eident Sports Marketing	\$63,822
Narragansett Improvement Co.	\$52,110
Federal Hill Commerce Association	\$27,779
Club Heat Inc. (Level II)	\$25,334
Classic Artist Entertainment	\$24,652
RI Department of Transportation	\$23,976
Arts and Culture Department	\$20,202
Mi Sueno	\$19,883
Monet Lounge	\$17,501
RI Child Support Legal	\$16,696
Jovan's Lounge Ltd.	\$16,117
Club Ultra	\$13,313
Colosseum Night Club	\$11,583
Verizon	\$9,955
Rosciti Construction	\$9,071
Fleet Construction Co. Inc.	\$8,647
International Paving	\$7,308
7 Eleven Inc.	\$7,193
DCYF	\$6,347
<i>Nonprofits, Charities, &amp; Community Groups</i>	
WaterFire Providence*	\$98,062
AGI Construction	\$50,465
Puerto Rican Culture	\$31,591
Quisqueya in Action	\$31,449
Gloria Gemma Breast Cancer	\$31,090
Puerto Rican Parade of RI	\$11,819
Central American Festival	\$11,083
Gloria Gemma 5K Race	\$10,143
Source: City of Providence	
Note: Reflects delinquent amounts as of Dec. 2012	
*Has an agreement allowing payment of only \$25,000 annually.	

Correction: A previous version of this table incorrectly identified Club Heat as Club Karma, it is Level II. Both nightclubs are located at 101 Richmond Street.

### Related Articles

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- [BREAKING: Providence Budget Approved by City Council Committee](#)
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## GRANTS AVAILABLE FOR EARTH DAY PROJECTS AT RI RIVERS, LAKES

Published: February 13, 2013 05:01 PM

Comments



Richard Salit

Published: February 13 2013 05:01

The Narragansett Bay Commission is trying to entice organizations to plan ambitious Earth Day cleanups by offering grants ranging from \$250 up to \$1,000.

The grants may be used for volunteer cleanup, restoration and beautification projects at rivers and lakes. The projects must have an educational component and take place in Providence or in one of the surrounding communities served by the wastewater utility.

Those eligible to apply for grants include state and federal agencies, municipalities and nonprofit organizations. Applications can be found online at [narrabay.com](http://narrabay.com). For more information, e-mail [Kimberly.Kirwan@narrabay.com](mailto:Kimberly.Kirwan@narrabay.com).

The deadline for applications is Friday for projects that must be completed by Aug. 13.



SMALL BUSINESS

## Frustration building over Hope Street road work



PBN PHOTO/NATALJA KENT

**SLIGHT DETOUR:** Patty Zacks, owner of The Camera Werks on Hope Street, said the restart of road construction surprised her and some neighboring businesses.

By Lindsay Lorenz  
PBN Researcher

Posted 4/29/13

After a winter respite, sewer-line installation along Providence's Hope Street has returned, along with traffic detours, parking woes and inconveniences to pedestrians, all of which are causing disruptions and headaches for the area's small businesses.

The construction, part of the final stretch of the Narragansett Bay Commission's Combined Sewer Overflow project, has been ongoing for about 18 months, according to Jamie Samons, public-affairs manager for the commission. She said construction is expected to last until July, as workers rebuild the street's concrete base and begin repaving.

For Bob D'Ambra, the owner of D'Ambra Service Station on Hope Street, that means fewer customers.

He said that since construction has picked back up, his usual steady flow of customers has declined.

"It has affected business quite a bit," he said. "Especially for gas sales, because it makes it very difficult for people to get in and out."

Due to the project, traffic on parts of Hope Street is one-way only. In addition, street parking is tougher than usual to find and concrete barriers in some spots force pedestrians to walk a couple blocks before they're able to cross the street.

D'Ambra said the situation is something his business will just have to ride out during the next few months.

"I can't see what I can do about it," he said. "I have no control."

Caryn Guadagnoli, the owner of Po Chue's Fitting Room, a shop located on nearby Burlington Street, said she's resorted to altering her workweek to keep business going in spite of the circumstances.

She said that many of her customers have been deterred by the lack of parking. To make things easier, she's been keeping her shop open later during weekdays and has added weekend hours. Sometimes, she even makes house calls.

"It's really changed the structure," said Guadagnoli, who has been in business for about 30 years.

Her Burlington Street neighbor, Denise Parrillo, who owns Poochies, A Pet Salon, with her husband, Bill, said she recently put a sign up for customers thanking them for their continued patronage as the construction continues.

Parrillo said because most of her clients are simply dropping off or picking up their pets, the construction hasn't really affected her business. But she has noticed that a lot of normally busy businesses on Hope Street, particularly some of the lunch spots, haven't been too busy lately.

While a decline in business does have merchants worried, some are also peeved about the lack of direct communication from the Narragansett Bay Commission about the construction schedule.

Patty Zacks, owner of The Camera Werks, has run her business out of the same location for 26 years. "For this sort of work, there should be some sort of human contact," she said.

Zacks said she received a letter about a year ago from National Grid warning of upcoming work in conjunction with the Combined Sewer Overflow project, but nothing lately. The restart of the construction came as a surprise to her and some of the neighboring businesses she checked in with.

"If six people don't know about this, then that's too many," she said.

Samons said the commission had informed community members through print and radio ads and public meetings, and was in contact with the Hope Street Merchants Association.

Samons added that the commission has also performed in-person visits with some businesses.

"We value our neighbors and we try to work with them as much as possible, but at the end of the day we have to go where the pipes are," she said in regard to the construction.

Providence City Councilor Kevin Jackson said he knows the construction is having a "huge impact" on businesses in the area and said he's trying to work with the contractor and the Department of Public Works to ensure the project is done on time.

He said some business owners have asked if there's anything that can be done to speed up the process or if the construction could be done at night. The only solution, he said, would be to have crews work longer or later hours, which would disrupt residents in the area trying to get some sleep.

"It's a tremendous inconvenience, but it's something that has been planned out – this is not the beginning, it's actually the end – we're just hoping that everything is done in the timely manner they set out and we can get back to normal soon," he said.

In the meantime, Zacks said her regular customers will likely tolerate the inconveniences caused by the project, but she worries first-time customers might prefer to avoid the Hope Street chaos.

She said she doesn't really know what can be done except to get the word out that her business exists and is still open.

"There's nothing I can do to make this better," she said. "This is the worst it's ever been, and this is the quietest it's ever been, and for me it's very scary." •



## PROPOSED LEGISLATION WOULD CREATE STATE-WIDE WATER AUTHORITY

Published: May 13, 2013 03:50 PM

Comments



Philip Marcelo

Published: May 13 2013 03:50

PROVIDENCE, R.I. -- Rhode Island's drinking water would be overseen by a non-governmental "Ocean State Regional Water Authority," under [legislation introduced into the General Assembly last week](#).

The authority would be authorized to purchase or lease water systems currently operated by quasi-public agencies throughout the state, including the Providence Water Supply Board that serves roughly 60 percent of state residents.

City leaders as recently as 2008 have floated the idea of selling the board and its network of reservoirs and treatment plants to plug budget shortfalls.

State Rep. Christopher Blazewski, a Providence Democrat who is the prime sponsor of the bill, said the legislation has been introduced at the request of the board, and represents a potential first step to transferring ownership of locally-run water authorities to a state entity.

The goal, he said, is to better distribute the state's water resources.



## EDC AWARDS FUNDS TO R.I. SOLAR-ENERGY PROJECTS

Published: May 21, 2013 04:43 PM

Comments



Alex Kuffner

Published: May 21 2013 04:43

The board of directors of the [Rhode Island Economic Development Corporation](#) has approved more than \$78,000 in funding from the state Renewable Energy Fund for two solar energy projects.

The board voted on Monday to award a grant of \$53,170 to [the MET School](#) to install a 41.76-kilowatt solar array at its Paul Crowley East Bay Campus in Newport. It's one of three solar projects that the new school is planning as part of its goal to be a net-zero energy consumer, meaning it would generate all the energy it needs.

The board also awarded a \$25,000 loan to [the Narragansett Bay Commission](#) to fund a feasibility study for installing solar arrays on its two inactive landfills at the Bucklin Point Wastewater Treatment Facility in East Providence.

So far this year, over two rounds of funding, a total of \$262,504 has been awarded from the Renewable Energy Fund, which is supported by a surcharge on all Rhode Island electric users. The funds have gone to nine businesses and organizations.

## June's Rains Straining Stormwater Systems

By TIM FAULKNER/ecoRI News staff

**PROVIDENCE** — This month's rain hasn't yet stopped, but Greater Providence has already swallowed an ocean of stormwater.

A June 7 storm dropped 3.2 inches of rain and filled up the 66 million-gallon overflow tunnel running under the city that delivers stormwater to a wastewater treatment facility on the waterfront. Additional overflow was sent to holding tanks in Providence and East Providence. An unspecified volume of stormwater was dumped directly into Narragansett Bay, as the tunnel exceeded its capacity, which is equipped for a 3-month storm, or about 1.6 inches of rain every six hours.

Monday's rainfall was heavy, too. In 24 hours, 31.7 million gallons of stormwater flooded the tunnel. An additional 86.9 million gallons went to the Field's Point treatment plant. On an average dry day, Field's Point treats 40-50 million gallons of wastewater, with a capacity of 77 million. During heavy rains, all collected stormwater and sewage receives some sort of treatment and disinfection. However, all of the initial, most polluted stormwater, receives full processing before it flows into the bay.

The Narragansett Bay Commission's Combined Sewer Overflow (CSO) project is in its second phase and currently processes about 60 percent of the stormwater and wastewater from Providence, Pawtucket and Central Falls.

Work on the Hope Street and North Main Street areas are expected to finish in early August. Work along the Woonasquatucket River Greenway Bike Path is nearly done and the bike path is scheduled to reopen June 14. A pipe is also being installed between Gano Street and Richmond Square on the East Side.

The project has already created a cleaner and healthier Narragansett Bay by reducing the amount of sewage released into the upper bay. Shellfishing areas, beaches and other habitats have shown significant improvement.



## **LON COHEN: INEFFICIENCY AT NARRAGANSETT BAY COMMISSION**

Published: June 14 2013 09:26

I am a homeowner and pay by Narragansett Bay Commission bill by automatic withdrawal from my checking account. Yet each month, I get a bill with the words "do not pay" on it.

I called the NBC to tell it that it is not necessary to send me a bill each month. I can see the amount charged from my bank statement and it is a waste of money for the cost of mailing and printing. If I managed this operation, and could save money by not billing every account that has automatic withdrawal, probably saving hundreds of thousands of dollars and reducing charges to the public, I would do so.

I was told nothing could be done. I find this response unacceptable. Oh well, just another example of the public absorbing the costs for an inefficiently run entity.

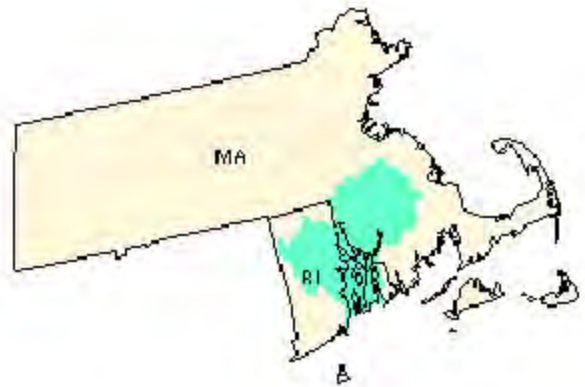
Lon Cohen  
Providence



## Massachusetts Plays Key Role in Keeping Narragansett Bay Healthy

By FRANK CARINI/ecoRI News staff

About 60 percent of the Narragansett Bay watershed is in Massachusetts. (EPA) Stormwater rushing off the many acres of impervious surface that covers much of the Narragansett Bay watershed sends bacteria, nutrients and other contaminants into the Ocean State's signature resource. Much of that polluted runoff originates in Massachusetts.



While each state is dealing with stormwater runoff in both expensive and commonsense ways, the problem impacts Rhode Island more directly. About 60 percent of this critical watershed resides in Massachusetts, but 90 percent of Narragansett Bay's waters are in Rhode Island. Narragansett Bay is 148.6 square miles — 140 of which are in Rhode Island. Its watershed encompasses 1,754 square miles, with 1,024 in Massachusetts.

Narragansett Bay defines much of the Ocean State. Its many beaches, tourist attractions and fishing opportunities — both recreational and commercial — are a significant part of the state economy. In fact, several estimates suggest that the total value of the natural resources of the Narragansett Bay watershed exceeds several billion dollars a year, according to a 2003 study by two University of Rhode Island researchers.

Narragansett Bay is an estuary — a semi-enclosed waterbody open to the ocean at its mouth and connected to the land by rivers, streams and groundwater. It is the largest estuary in New England. An average of 2 billion gallons of fresh water flows daily from Rhode Island and Massachusetts into the salt waters of the bay.

When it rains, much of that flow is stormwater runoff. Stormwater includes human contaminants, sediment and oils from roads and parking lots, bacteria from pet waste and bird droppings, litter and debris. All this non-point source pollution runs into storm drains and eventually flows into Narragansett Bay.

The health of the bay is particularly jeopardized by the excessive accumulation of nutrients, most notably nitrogen from overused fertilizers and agricultural livestock waste. Elevated levels of these nutrients create algae blooms by choking oxygen out of the water column.

During heavy rains, like those that hit the region several times this month, up to 90,000 pounds of nitrogen can be washed into the bay, according to Tom Uva, the Narragansett Bay Commission's director of planning, policy and regulation. All that nitrogen, not to mention all the other pollutants and contaminants that ride a wave of stormwater into the bay, have a significant impact on water quality.

Eutrophication (i.e. algae blooms), nutrient loading and pathogens are some of Narragansett Bay's major environmental concerns, according to a 2007 U.S. Environmental Protection Agency (EPA) report. Stormwater, and the pollutants and nutrients it carries into the bay, is the prime culprit for those EPA-identified concerns exist.

In Rhode Island, this problem is regulated by the Department of Environmental Management (DEM). In Massachusetts, stormwater is regulated by the EPA.

With different agencies in charge of regulation and the many complexities associated with a watershed that straddles two states, it's no secret then, as Uva noted, Rhode Island and Massachusetts handle the problem differently.

Local, state and federal officials have worked well together to get a better handle on the problem. Each also has been frustrated at times by a perceived lack of promptness by one side or insufficient remedies by another.

### **All wet**

Every time it rains or snows, waterways in Massachusetts and Rhode Island are at risk of being polluted by stormwater runoff. During intense storms, rain and/or melted snow runs off roofs, driveways, parking lots and sidewalks, picking up contaminants such as roadway salt, lawn fertilizers, motor oil and

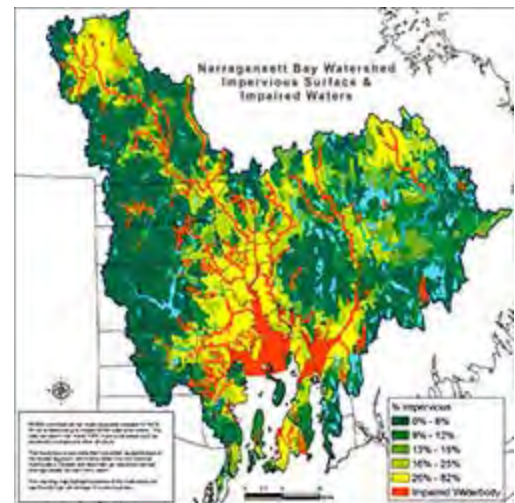
antifreeze. Wildlife habitat is destroyed and drinking water supplies threatened. A 1,000 square feet of impervious surface generates 28,000 gallons of runoff annually.

Many Narragansett Bay shellfish beds are closed after just a half-inch of rain in a 24-hour period. Popular beaches are closed because of high levels of bacteria swept into the bay by rushing stormwater. Studies show that the frequency of heavy rain events in both Massachusetts and Rhode Island are increasing.

Because of this, managing stormwater runoff continues to be a major concern for Rhode Island and Massachusetts communities within the Narragansett Bay watershed and to many beach-goers.

### **Covered up**

This map shows impaired rivers and streams (in red) with impervious cover (yellow is the highest) in the Narragansett Bay watershed. Click for larger image. (Watershed Counts) Development in the watershed is an inevitable challenge that will continue to put pressure on Narragansett Bay water quality.



Runoff is a natural part of the hydrologic cycle. The volume and speed of runoff depends on the size of a storm, the size of the drainage area, the slope of the land, the types of soils and the surface conditions such as woods or pavement.

In a natural, or undeveloped, setting, the surface often is pervious, meaning water can percolate into the soil. However, about 14 percent of the Narragansett Bay watershed is under streets, roofs, driveways and parking lots, preventing water from naturally infiltrating the ground.

The construction of homes, buildings and other man-made features alters the hydrology of the landscape. Vegetated and forested land is replaced with impervious surfaces that impact aquatic habitats, drastically change land use and generally increases the amount of stormwater runoff, which can cause erosion and flooding.

In Rhode Island, impervious cover by municipality ranges from 3 percent to 40 percent. When impervious cover is between 10 percent and 25 percent, streams show clear signs of degradation, according to various

studies. When impervious cover is more than 30 percent, efforts to restore flow and water quality to pre-development conditions are unlikely.

When impervious cover is less than 10 percent, streams support a wide range of life. Only 17 of 39 Rhode Island municipalities feature less than 10 percent impervious cover, according to DEM.

Stormwater runoff is the single largest source responsible for water quality impairments in Massachusetts rivers, lakes, ponds and marine waters, according to the Massachusetts Department of Environmental Protection (DEP).

Since the 1970s, development within the Massachusetts portion of the Narragansett Bay watershed has dramatically outpaced population growth, according to a comprehensive report by the Narragansett Bay Estuary Program.

Between 1971 and 1999, residential land in Massachusetts increased by nearly 47 percent, and between 1985 and 1999 nearly 40 acres a day were lost to development. During this period, Massachusetts lost 143,000 acres of wildlife habitat, and Worcester County, in the Blackstone River sub-basin of the Narragansett Bay watershed, had among the highest rates of loss.

The Blackstone River and Taunton River watersheds make up the majority of the Narragansett Bay watershed in Massachusetts. In fact, development in the Massachusetts area of this sensitive watershed impacts two of the three largest Narragansett Bay tributaries.

In Rhode Island, some 30 percent of land that was undeveloped in 1995 has since been built upon. And in the past 300 years, more than 50 percent of Narragansett Bay's salt marshes have been destroyed, and most of the remaining salt marshes have been damaged by development throughout the watershed.

The Narragansett Bay watershed is home to about 2 million people in 100 cities and towns. Providence and Worcester are the largest cities in the watershed.

### **Sewer overflows**

In November 2008, after many years of design and



construction, a 26-foot-diameter, 3-mile-long CSO tunnel built under Providence went online. (Narragansett Bay Commission) Stormwater causes combined sewer overflows (CSOs), which occur when a sewer system gets overwhelmed by stormwater and is forced to discharge untreated sewage. To comply with the federal [Clean Water Act](#), CSOs have and are being phased out across Rhode Island and Massachusetts, with large projects in progress in both Providence and Fall River.

Due to the heavy rains of the past week, a “serious” stormwater overflow occurred June 14 from the town of Shrewsbury sanitary sewer system, according to the DEP’s Edmund Coletta.

“The overflow caused a manhole cover to be dislodged and a combination of untreated sewage and stormwater is flowing out of the manhole at a rate of up to one million gallons a day,” he said.

This wastewater is flowing into nearby Hop Brook, which flows into Smith Pond and Thayer Pond.

Each year, the 64 CSOs in the Narragansett Bay Commission district release an estimated 2.2 billion gallons of untreated sewage/stormwater into the bay and its tributaries, namely the Blackstone, Moshassuck, Providence, Seekonk, West and Woonasquatucket rivers. CSOs pose pollution and public health risks since they contain residential, commercial and industrial wastes, and other pollution washed or illegally dumped into storm drains. These overflows carry pollutants in the form of sewage solids, metals, oil, grease and bacteria that can affect the health of those who swim in the polluted water or eat contaminated shellfish.

To protect public health, certain areas of Narragansett Bay are permanently closed to shellfishing, and some 11,000 acres are temporarily closed for harvesting when there is more than half-inch of rain.

Providence began building sewers in 1871, and by the early 1900s, the system was moving sewage and horse manure from the street into the nearest waterbody. “It was built to move waste into the river,” Uva said. “Providence even won an award for allowing all that waste to flow into the river. We’re now paying the price for that system.”

The Narragansett Bay Commission’s three-phase [Combined Sewer Overflow Project](#) will cost about \$1.3 billion when it is finally completed by 2017 or so. Phase I went online in 2008. The ongoing project has already created a cleaner and healthier Narragansett Bay, especially in the industrialized [upper bay](#). Since the Phase I CSO tunnel that runs under Providence went online five years ago, nearly 5 billion gallons of polluted water has been kept out of Narragansett Bay.

Replacing or repairing antiquated infrastructure, such as phased-out cesspools or failing septic systems, or cracked and leaking sewer and water lines, is an expensive but necessary task.

Nearly a third of Rhode Island's households dispose of sewage and wastewater into septic systems and cesspools. Many of the systems used by those 135,000 or so households are either inadequate or failing.

"Providence and Pawtucket have some of the oldest pipes in the country," Uva said.

### **Stormwater fees**

The concept of a stormwater utility district may sound complicated, but it's simply a fee on asphalt and other impervious surfaces. The concept isn't new. Some 2,000 U.S. municipalities use such districts to pay for costly repairs and upgrades to storm drains and drainage systems.

In Rhode Island — where municipalities are required to handle their own stormwater — Providence, Middletown and Bristol are considering the concept. In Massachusetts, only a few communities, including Chicopee, Newton and Reading, have incorporated some sort of stormwater utility or fee structure.

Many Rhode Island and Massachusetts communities within the Narragansett Bay watershed face costly infrastructure projects that need to be done but have no money to fund them. In the meantime, the environment suffers.

Providence, North Providence and Johnston are among the municipalities that the DEM has cited for stormwater violations.

Providence has 400 miles of sewers, 20,000 manholes and 175 outflows. When it rains, especially like it has this month, the city is violating environmental laws as stormwater floods streets, sewer pipes, ponds and rivers. Most of it eventually runs into Narragansett Bay.

While a stormwater utility district or fee is one possible solution to repairing and maintaining old and neglected drainage systems, the idea comes with some problems, at least in Rhode Island, according to Uva.

"In a state that is already very highly taxed, people are going to see it as a 'rain tax,'" he said. "In a good economy, such an idea would be embraced. But with 10 percent unemployment, the idea is going to generate a lot of dialogue."

Uva said one way municipalities and departments of transportation can better protect Narragansett Bay and help lessen flooding problems within its watershed is for them to do a better job cleaning, maintaining and inspecting catch basins.

Sometimes, though, that is easier said than done. Providence, for example, has 16,000 catch basins and only two trucks, which are capable of cleaning 10 basins a day, according to Sheila Dormody, Providence's director of sustainability.

“We have flooding. We have pollution. We have infrastructure that is in desperate need of attention,” Dormody said. “It is hurting our businesses that are already in Providence and hurting opportunities for recruiting more businesses. And we are not currently in compliance with the law, which means the environment is suffering.”

Cities and towns also could do a better job of sweeping streets once winter ends, Uva said. “Sand carries a lot of pollutants,” he said. “It’s very basic stuff, like better educating residents about the importance of picking up after their pets and making sure municipal trash bins are regularly emptied, so litter isn’t being blown around. It will eventually make its way to the bay.”

Silt buildup over the years has negatively impacted many of the rivers and streams that feed into Narragansett Bay. The Seekonk River, for example, once was 37 feet at its deepest point; today its greatest depth is 6 feet, according to Uva.

“All these rivers used to be much deeper. They all overflow now and flood because of the amount of silt that has washed into them,” he said. “Big, old sailing ships used to sail down the Seekonk.”

### **Simpler solutions**

Permeable parking lots are wonderful, but they need to be maintained to remain effective. There are a variety of less-expensive controls that municipalities, businesses and homeowners can use to help manage stormwater runoff.



A low-impact development (LID) approach to stormwater planning works with nature to manage stormwater close to its source. LID employs principles such as

preserving and recreating natural landscape features and minimizing the use of impervious surfaces to create site drainage that treats stormwater as a resource rather than a waste product.

There are many practices that have been used to adhere to LID principles such as retention ponds, rainwater basins underneath parking lots, permeable pavements, rain gardens, vegetated rooftops and rain barrels. It could be something as simple as digging up unused driveways or asphalt.

Since 2003, the Narragansett Bay Commission has approved 108 LID projects that have kept 6.5 million gallons of stormwater from flowing unabated into Narragansett Bay, according to Uva.

LID measures are a needed part of a successful stormwater management plan, but, like catch basins, they need to be properly maintained and inspected. Permeable parking lots are wonderful, but they can quickly become impervious and contaminate-rich after a New England winter of snow and ice.

“The problem with sand and salt on streets causes the same thing with porous parking lots,” Uva said. “They need to be vacuumed annually.”

*ecoRI News staffer Tim Faulkner contributed to this report.*



## WOONASQUATUCKET RIVER GREENWAY BIKE PATH REOPENS

Published: June 28, 2013 05:37 PM



Woonasquacket River Watershed Council



PROVIDENCE, R.I. -- The Woonasquacket River Greenway Bike Path -- closed from the footbridge at Merino Park (Sheridan Street) to Manton Gateway since September of 2011 for work on the Narragansett Bay Commission's Combined Sewer Overflow Abatement Program -- has reopened.

"At long last, the construction is over," the Woonasquacket River Watershed Council said Friday in a news release. "Join us on Saturdays to ride the path...without detouring to Manton Avenue!"

"Community ride leaves every Saturday at 2:30 p.m. from the [Red Shed Bike Shop at Riverside Park](#) -- 50 Aleppo St."

## IN NARRAGANSETT BAY, TIDE IS TURNING AGAINST STORMWATER POLLUTION

Published: July 29, 2013 11:26 PM

Comments



Bob Breidenbach/The Providence Journal

Lifeguard Nicholas August, 16, of Bristol, keeps an eye on the town beach Monday. Changes near the beach have improved water quality and cut closure days from about eight in previous summers to none this year.

1 of 2



By RICHARD SALIT

Parks and recreation director Walter Burke beams as he zips around Bristol Town Beach in a golf cart and points out the slew of improvements undertaken in the past two years to prevent polluted stormwater from reaching Narragansett Bay.

Pavement was reduced. Trees were planted to discourage Canada geese from landing and fouling a picnic area. Wildflower gardens were put in the parking lot to capture runoff. And, most recently, a pipe that carried runoff into the Bay from a nearby neighborhood was diverted into a gravelly, vegetated “bioremediation” area where it can be naturally filtered and treated.

“We used to have eight closures a year,” Burke said. This summer, he said, “We’re one of the only beaches that hasn’t been closed. Not only that, the [bacteria] numbers are very low.”

While frequent and heavy rain this summer has brought an unwelcome spate of beach closures, state health and environmental officials say that stormwater improvements in Bristol and elsewhere around the Bay have led to a noteworthy decrease in recent years in closures due to bacterial contamination.

“Over the years, we’ve been seeing cities and towns working hard to fix the sources of contamination,” said Aimee Parris, who manages the state Health Department’s beach-monitoring program. “All of those improvements have worked to reduce our beach closures ... Despite the rain going up some years, our beach closures are continuing to go down.”

She points to a chart her office put together tracking beach closures and rainfall from 2000 to 2012. In the very wet summer of 2003, rainfall exceeded 16 inches, resulting in 503 closure days. Another rainy summer in 2006, with 15.5 inches of precipitation, resulted in far fewer closures, a total of 351.

An even more remarkable year followed in 2009, when more than 17 inches of rain fell but beach closures totaled just 230 days. Rainfall held steady at about 13 to 16 inches the next three years, but closures dropped from 148 to 54 in that same period.

**The marked decline** can be attributed, in large part, to the completion in the fall of 2008 of the first phase of the Providence CSO (combined sewer overflow) project, officials say.

Providence's underground pipes carry sewage and storm water, as is the case in many older cities. So during major storms, the system gets overwhelmed and discharges raw sewage and rainwater into Narragansett Bay and its tributaries. An estimated 2.2 billion gallons of untreated wastewater used to pollute local waters every year, particularly in the upper Bay.

To address the problem, the Narragansett Bay Commission built a deep, 3-mile-long pipeline to store the collected stormwater until it can be pumped to the Fields Point wastewater-treatment plant. The project cost \$359 million. By the end of 2012 the improvements prevented an estimated 4.6 billion gallons of untreated overflow from being dumped into the Bay.

The project is credited with improving water quality for swimming and shellfishing, particularly in the upper Bay. Prior to 2013, for example, Barrington Beach had no closures in 2012, one in 2011, and two in 2010. Across the Bay at Warwick's Conimicut Point, beach closures exceeded 40 or 50 days in bad years in the early 2000s, but in recent years have stayed in the single digits or teens.

"The upper Bay is a really big improvement. We are really excited about seeing the improved water quality," Parris said.

Elizabeth Scott, a 25-year veteran at the state Department of Environmental Management and the deputy chief of surface water protection, has noticed the same favorable trend.

"We're beginning to see that relationship between rainfall and beach closures change," she said. "We've definitely seen fewer closures in the upper Bay."

Warren just completed more than \$2 million in improvements at its beach, including replacing a sewer pipe along the water that was suspected of being leaky. Also, drainage swales were created to capture runoff from an uphill recreational site and parking area, sending the runoff into the ground instead of onto the beach.

Scott said that notable efforts also have been made elsewhere in the Bay and on oceanfront beaches, including repairs of failed septic systems along Greenwich Bay. At the Atlantic Beach Club beach and Easton's Beach on the Newport-Middletown line, an ultraviolet disinfecting plant is treating runoff before it reaches the beach and an extended outfall pipe for Middletown storm water is going online.

As for Bristol, "That's a great success story," Parris said.

Burke's attack at the manmade beach was multi-pronged. Failing septic and leach fields were replaced with a sewer line. More than 100 trees were planted to disrupt goose landings. A steep slope above the beach was leveled to curb runoff. Fertilizer use was changed. And half the width of an access road was stripped away.

"It's important for the public to understand there have been these investments in infrastructure improvements, and this is what we are seeing for it," Scott said.

Community News

## Digging on the East Side Continues

An update on Narragansett Bay Commission's East Side construction

Steve Triedman  
Posted 8/12/13



Photo by Peter Goldberg

Community News

### [Hope Street Businesses Make it Through Construction](#)

By outward appearance, the rebuilding of the Hope Street infrastructure, which started in April and just ended in August, appeared to have disaster written all over it. The section of the street from the Pawtucket line to Rochambeau was barely passable for vehicular traffic. Barriers, detour signs and one lane only traffic were everywhere. Even if you could get through, you couldn't park! And, even if you walked over from the neighborhood, crossing the street was your next challenge, and it was a big one.

Yet somehow, as the paving concludes and the street returns to normal (even better than normal one could argue), it appears the merchants survived. Indeed, some even seemed to flourish. And if you never knew what the [Narragansett Bay Commission](#) was, you certainly do now. Most importantly, another step to safeguard our precious Narragansett Bay has been taken. So, why did it work so well and who's next on the group's hit list?

The City certainly tried to assist in the process. According to Jim Bennett, the Director of the Providence Office of Economic Development, "the City provided residents with temporary overnight parking permits for those whose driveways were inaccessible during the construction period." He also expressed gratitude to the neighborhood and the businesses for understanding and supporting these important infrastructure improvements.

And while the work on Hope Street is done, many months of work remain in the Summit Neighborhood/Miriam Hospital Area/North Main Street areas and it may not be pretty. Narrow streets are often closed and heavy equipment, traffic detours and delays are constant.

The government entity that is behind all of this work has two of the three buzzwords in its name to encourage our support for whatever it is that they do. We asked 5 random people if they knew what the Narragansett Bay Commission (NBC) does and they all responded, "They send me a bill for water or something."

So what exactly *do* they do? Created by the State in 1980 with an \$87.7 million dollar bond, the Narragansett Bay Commission has grown at a staggering pace and now boasts hundreds of employees. But more importantly, they have also dramatically reduced the amount of wastewater, sewage and sludge that gets into Narragansett Bay.

So why is all this construction necessary now? In actuality, the project is overdue. The NBC's Combined Sewer Overflow (CSO) Program is a federally mandated water quality improvement project to comply with the 1972 Federal Clean Water Act (41 years after passage!). Completion of these projects will enable Rhode Island to meet the Department of Environmental Management policy to "eliminate overflows from a three-month storm" - 1.64 inches of rain in six hours.

The new main line at Field's Point has already kept about five billion gallons of sewage from entering Narragansett Bay. And the new lines along with the Seekonk River Line (NBC's next project) will connect into the main line and keep most of the East Side sewage out of the Bay. Water quality for swimming and shell fishing has already been greatly improved in the Bay since these steps were taken.

To their credit, the Commission has been quite conscientious about their project. They have been praised by Hope Street merchants, neighborhood associations and residents for their constant streams of information about scheduling and dislocations. There have been some minor delays and the project went longer than expected, but when compared to what has been accomplished, the results seem quite impressive.

The bottom line is that this is work that *had* to be done. The infrastructure of the city's sewage system is well past its prime and no longer able to handle the current demands. The new sewer separation on Hope, north and south of the Miriam Hospital, and North Main will diminish the sewage overflows into the Moshassuck River (which ties in with the Providence River and heads to

the Bay when there is a heavy rain). By adding separate storm sewers, the capacity of the existing sanitary sewer is increased, which lessens, indeed virtually eliminates, the possibility of having the sanitary sewer overwhelmed during wet weather. Rainwater will still flow into the Moshassuck, but from a new separate sewer and it will not carry bacteria and floatables from the sanitary sewers.



However the rainwater will still carry animal waste, lawn chemicals, and gas and oil from roads and parking lots, so it's not completely clean. The EPA is requiring more and more municipalities to develop plans for dealing with storm water. It's a huge task with hundreds of pages of guidance documents from the Environmental Protection Agency (EPA).

In Providence, Sheila Dormody, the Mayor's Director of Sustainability, in conjunction with DEM, has been holding workshops to discuss the possibility of creating a storm water utility to take a regional (or perhaps even state-wide) responsibility for handling storm water. "It's a serious issue that involves six communities along the Bay and we're doing a two-part study to see if we can come up with a solution." The study should be completed in 2014. Bottom line is that a financed solution will still have to be paid for, so even if they decide to have NBC manage it, there will be an additional cost to taxpayers.

The projects to the north and south of Miriam and the project on North Main Street will also improve the drainage in the area. Even in a moderate steady rain, North Main Street can become an ocean. The new storm sewer, drains and catch basins should go a long way towards improving that situation.

Now, the bad news. The areas north and south of Miriam will be under construction for another year to 18 months. Reconstruction on North Main should begin in August and should take about a month.



North Main Street is technically a State Road, Route 1, so legally daytime work is restricted. Like Hope Street, North Main Street will be rebuilt from the concrete base to improve the integrity of the road.

Phase I of the project included a deep rock tunnel that captured sewage overflows and transports the flow for treatment to the NBC's Field's Point Wastewater Treatment Facility. The Phase I tunnel was completed in 2008, and has captured (and transported for treatment to the Field's Point Wastewater Treatment Facility) over five billion gallons of combined sewage that otherwise would have flowed into Nar-agansett Bay. Phase II includes two near surface interceptors along the Seekonk and Woonasquaket Rivers to bring additional flow to the Phase I tunnel, a new storm drainage system in the Summit neighborhood and a constructed wetlands in Central Falls.

The other major East Side NBC project is, for the most part, out of sight – out of mind as it runs along the Seekonk River. It will be primarily the work of "The Seekonk River Monster," a powerful mini-tunnel boring machine that was lowered into a shaft near the Wyndham Hotel and will dig a tunnel for a new pipe that will create a new underground system that will connect to the line at Davol Square. It will also be able to handle all of the new projects in the I-195 corridor whenever it is built out.

Here are some things you might want to know about the Seekonk River/India Street project:

- It will require an 8,000-ft long, 48-60" diameter pipe along the Seekonk River. It will run from the hurricane barrier to the Salvation Army on Pitman Street at depths ranging from 10 to 35 feet and cost \$18.7 million.
- The Seekonk River Monster, the tunnel-drilling machine, only goes in a straight line. So, receiving pits at various surface locations must be created when the machine is redirected or needs to turn a corner.
- A jacking pit at India Street will result in a temporary street closure between South Main and South Water Streets. Traffic will be redirected via Tockwotten Street going west, right on South Main, left on Tockwotten, right on South Water... opposite going east early in September (see map).
- The majority of the work in India Point Park will begin in January 2014, with completion in April 2014 and the entire project should be completed by December 2014. There will also be isolated street closures and traffic disruptions on Pitman Street between Butler Avenue and Richmond Square likely in October, 2013.

Unfortunately even after all this work is done, there will still remain some potentially significant problems. The biggest one is in the City of Providence owns all of the catch basins (and there are thousands). If they are not regularly maintained, it will allow storm water to get into storm drains or gutters on the street. Many street drains on the East Side are caked solid with dirt and debris and don't do a good job at letting storm water in. The City is woefully under-resourced when it comes to cleaning their existing catch basins as they only have a few trucks with the proper maintenance equipment. The new sewer will alleviate the sanitary overflow issue. However, the new CSO catch basins installed in the Hope, Summit and North Main areas are owned by the City, which will be responsible for their maintenance and cleaning. In fairness to the City, while the NBC lives for sewers, Providence has a myriad of other issues to handle with an increasing tight financial budget.

This year's budget for NBC was \$78 million and they have 251 employees. On the ironic side, (according to NBC's staggering 275 page annual report) the ten largest customers by billing are all, except one, non-profits or municipalities – Brown University, Rhode Island Hospital, Providence

Housing Authority, City of Providence, City of Pawtucket, Providence School Department, Providence College, Johnson & Wales, Fairfield Residential (owns apartment complexes, including University Heights and Sutterfield, and Shorewood in North Providence) and the State of RI.

Hopefully you now know more about the NBC, what they do and why they are important. You also now have a sense of what's coming next. Bottom line, there will be short-term traffic inconveniences in various parts of the East Side for the next year to 18 months. However, the East Side will be left with a dramatically improved infrastructure, a greatly improved environment and many streets paved that probably wouldn't have been paved for a long, long time. Hopefully the results will be as successful as Hope Street's seem to be.

## Hope Street Businesses Make it Through Construction

### How did the most recent three-plus month dislocation impact businesses on the popular street?

Barry Fain  
Posted 8/12/13

Now that the paving of the street is completed, Hope Street merchants and their neighbors are finally regaining full use of their turf. So the obvious question is how did the most recent three-plus month dislocation impact businesses on the street? The answer was more positive than we expected.

Lynn Williams, owner of the popular [Seven Stars Bakery](#), is perhaps the best place to start. “I just ran my figures over the period, and I guess I’d say I’m off about 10% over the period,” she reports. “But that said, the street work had to be done and I see it as part of my civic responsibility, though I’m certainly glad it’s over.” She also echoes what seems to be an almost unanimous sentiment among the merchants in praise of the professionalism of the Narragansett Bay Commission. “There were problems of course, but no surprises. They communicated well with us.”

Asher Schofield of [Frog and Toad](#), and president of the [Hope Street Merchant’s Association](#), confirmed this assessment of the NBC. “They got ahead of the process and met with us to ensure a minimum amount of confusion. They certainly sought our input on the wording and the positioning of signs along the street. It was quite different than when National Grid just appeared on our streets ready to start digging during our important holiday season without so much as a warning. I’d give them an F minus.

But meanwhile, our group saw this project as an opportunity to improve our neighborhood. We hired a designer to sketch out some possible changes that could be implemented before the NBC left the street, and they were certainly receptive to many of our suggestions. The improvements ended up not costing the taxpayers anything and were implemented without stress to the city.”

In terms of business, Frog and Toad actually did just fine during the roadwork. “If this project were in a totally car dependent location like Seekonk it could have been a disaster,” Asher points out. “Hope Street is much more locally supported with a good number of walkers and bikers in the nearby community. They have been wonderfully supportive during this period.”

Nina Tegu, owner of [Studio Hop](#), feels her business remained steady during the period. “Sure, some customers complained about having to walk further to the store but most learned to come to shop at different times to avoid the worst traffic. It was tougher at the beginning of the work but certainly got better over time.” Now she looks forward to having a smoother and improved Hope Street. Like most

of the other merchants she praises her neighbors. "I couldn't ask for a more supportive community here," she notes.

Next door Alexis Cormier, the manager of [Kreatelier](#), was equally positive. "We did everything we could to offset the roadwork. We extended our delivery services to customers whenever we could for their convenience. We also stressed to customers that the project was for a really important cause, ultimately important to all of us in the community."

At the head of the street, Dan Goldman of [Green River Silver Co.](#) agrees, "We weren't affected as dramatically as I feared. And it did improve over time, though I'm sure some people were scared off. I must agree that the Bay Commission did a great job and tried to be as considerate of our needs as possible." When asked about where he thinks the pipe replacement project should go next, Dan laughed and suggested, "they can go anywhere they want as long as it's not here."

Stores like Swan Liquor, which are less of a destination and more of a convenience purchase, were affected by the street disruption. But even here, the store manager acknowledged that while they certainly had a rough beginning when the project first started, the business gradually improved as people got used to the relocations along the street.

Two other proven techniques seemed to help the street hold its own. First, the merchants continued to promote their businesses despite the traffic inconveniences. And second, as stated by Sarah Bates, the manager of Luli Boutique, they stressed customer service. "We went out of our way to be especially positive to the customers who took the extra effort to come in. There's not much else you can do, but it does pay off."

So it does appear there will be a happy ending on Hope Street to the past few months: a better looking street for sure, and, a neighborhood that is breathing a sigh of relief that the project is finally over.

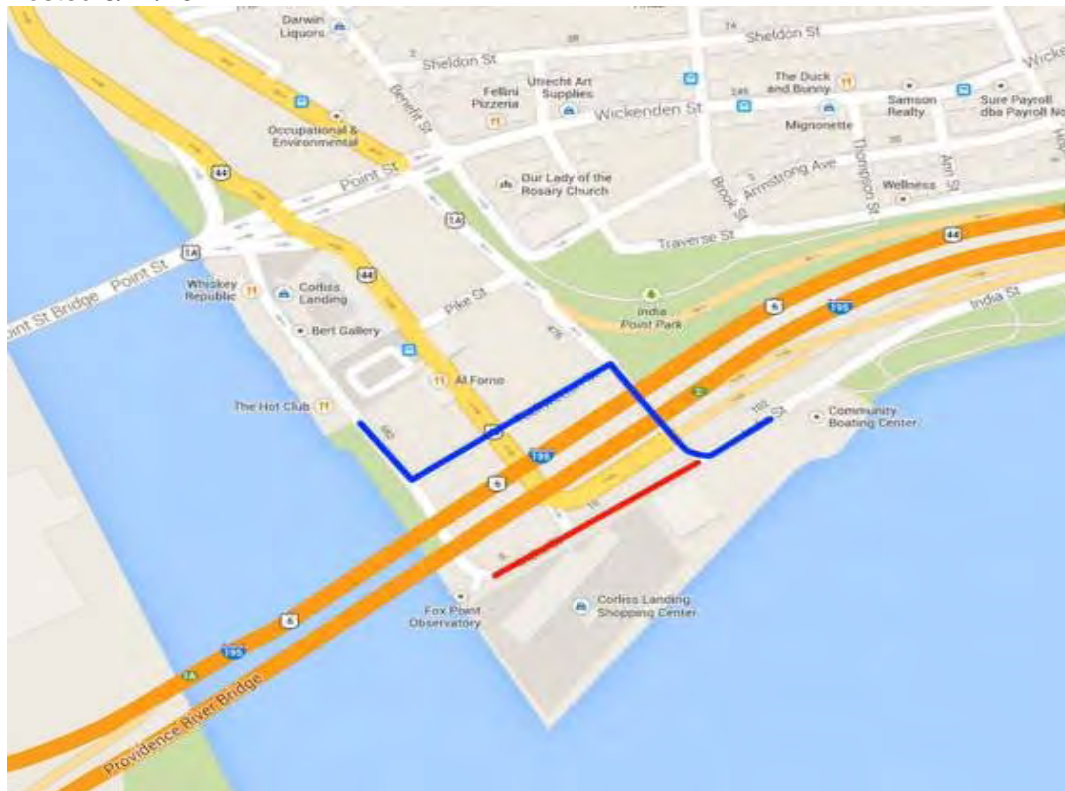
# East Side MONTHLY

What's Next

## The Next Phase of Construction

Be aware of these detours to make traveling easier during NBC's next project

Steve Triedman  
Posted 8/12/13



[Click to enlarge](#)

Detours during the next phase of construction

Photo by Courtesy of the Narragansett Bay Commission

The India Street detour will take drivers coming from India Street directly to the south of Al Forno Restaurant (see above map). The closure area is in red, detour in blue, and will not affect the entrance to the Al Forno parking lot. It is scheduled for mid-September and will last 8-12 months. Because of the nature of the work (which also includes repairing an existing sewer), it will be open-cut, not micro-tunneled, which necessitates closing the road. The detour in blue is also the detour the Rock & Roll half-marathon runners will use.

## DECADE AFTER MASSIVE FISH KILL, NARRAGANSETT BAY HEALTHIER, BUT WORK REMAINS

Published: August 19, 2013 11:30 PM

Comments



Frieda Squires/The Providence Journal

John Torgan, the director of ocean and coastal conservation for The Nature Conservancy, returns to Apponaug Cove, in Warwick, where he observed millions of dead fish 10 years ago.



By RICHARD SALIT

On Aug. 20, 2003, John Torgan awoke to a call about dead fish in Greenwich Bay. As Baykeeper for Save the Bay back then, he rushed to Warwick to investigate, climbing atop a sea wall overlooking Apponaug Cove.

What he saw he couldn't believe.

“The water was pea soup green. You could not see two inches down into it,” he said. “There were belts of dead and dying 2½-inch to 3-inch menhaden. It stretched as far as you could see.”

When Torgan returns to the very same spot a decade later, he's pleased to see water clear enough to see to the bottom and a live eel surfacing in the shallows. It's a sharp contrast to the horrible scene that greeted him 10 years earlier.

“It was like nothing I had seen before and nothing I have seen since,” said Torgan, now the director of ocean and coastal conservation for The Nature Conservancy.

Tuesday marks the 10th anniversary of what became known as the “Greenwich Bay Fish Kill,” an infamous episode in which an estimated 1 million fish died gasping for air due to a lack of oxygen.

The massive scale of the die-off — so much greater than any previous fish kills — and the horrible stench it produced for many days — created a watershed moment in efforts to improve water quality in Narragansett Bay.

“I think it was a wake-up call,” said Tom Kutcher, who succeeded Torgan as Baykeeper. The thinking was, “We can't wait for another fish kill. ... People got moving.”

In the months after the fish kill, the governor formed study committees and ordered a report and the General Assembly took the baton by passing laws to better manage Narragansett Bay and to protect it from nutrient discharges linked to the fish kill.

But even with those improvements — some of which only recently have been completed and some of which are still being finished — concerns remain. Earlier this summer, scientists monitoring conditions in the Bay grew alarmed. Their measurement detected some of the worst low-oxygen conditions in the Bay in years.

**The summer of 2003** was a perfect storm for a truly historic fish kill, according to the follow-up report.

It was particularly wet, with more than 16 inches of rain falling, including a 3.75-inch deluge from Aug. 7-8. Runoff from the storms carried nutrients from human and animal waste into the Bay, providing an ample source of food for phytoplankton, microscopic plant-like organisms. Add to that warm Bay waters and lots of sunshine and conditions were ripe for algae growth.

Sure enough, phytoplankton blooms followed. Once the nutrients had been consumed, however, the phytoplankton began to starve. They died, sank and decomposed, a process that depletes oxygen on the bottom.

While winds sometimes mix water layers and replenish oxygen levels, that was not the case in August 2003. Dissolved oxygen levels rapidly reached zero, called anoxia, in the shallows of Greenwich Bay.

Meanwhile, large schools of juvenile menhaden had arrived in Greenwich Bay, driven there and cornered by hungry bluefish.

“That was it for them,” said Christopher Deacutis, a water resources specialist for the DEM who wrote the Fish Kill report.

By Aug. 20, menhaden were trapped with no air to breathe and quickly began dying. Some crabs, shrimp and eel perished, too.

The DEM report noted that low oxygen conditions existed all the way to the Jamestown and Newport Bridges.

Prior to the fish kill, said Torgan, he and his colleagues sounded the alarm about unprecedented numbers of juvenile soft-shell clams dying.

“It took fish to get people to pay attention,” he said.

**While Deacutis** and his colleagues were taken aback by the scale of the fish kill, they weren't surprised by the conditions that caused it. They had been studying low oxygen in the Bay for years.

In 1999, Deacutis led the formation of a group that came to be called the Insomniacs for their late-night trips onto the Bay to measure oxygen levels and record other data.



It was spurred by much smaller fish kills and occasional reports of gray-colored water and hydrogen-sulfide odors.

The scientists came to believe that human sewage systems and storm-water pipes were largely to blame. But their concerns didn't gain much traction. Their critics deemed the causes to be natural and the proposed solutions too costly.

But the DEM report on the 2003 episode pinned the blame on the long-suspected culprit: human sources of nitrogen. The biggest contributors were identified as effluent from sewage treatment plants.

With the public outraged over the fish kill, Governor Donald Carcieri created the Rhode Island Bays, Rivers and Watersheds Coordination Team to better manage the Bay and the General Assembly passed laws mandating ecosystem-based management of the Bay and a 50-percent reduction in nitrogen discharges from sewage treatment plants by 2008.

Angelo Liberti, chief of the DEM's surface water protection program, said that his agency targeted 11 of Rhode Island's 19 wastewater treatment plants — the ones located on the troubled waters of the upper Bay — to comply with the state's first-ever nitrogen limits. It took several to settle appeals and negotiate new permits.

Ultimately, the larger plants were required to meet a cap of 5 milligrams of nitrogen per liter, while the smaller plants can't exceed 8 milligrams.

By 2013, nitrogen discharges were cut by 40 percent.

“We're getting close, but we're not quite there yet,” Liberti said.

The Narragansett Bay Commission's Fields Point plant, the largest in the state, had until 2014 to complete its upgrade but “it's actually done now,” spokeswoman Jamie Samons said. “We're getting fantastic results.”

Nitrogen has dropped from an average 15 mg of nitrogen to below 4 mg. The agency's Bucklin Point facility in East Providence has a 2016 deadline, but other system improvements have already helped reduced nitrogen to about 7 mg.

Nitrogen removal systems are expensive, Samons said. It will cost about \$110 million for the nitrogen systems at the two plants and about \$1.5 million a year to operate them.

Another commission project is also having an impact on nitrogen levels, even though that was not the purpose when it began prior to the fish kill. In 2008, the agency completed construction of a 3-mile underground pipeline in Providence to capture overflows from combined sewage and storm-water pipes during heavy rains. Before, raw sewage would get flushed into the Bay and contribute to beach and shellfish bed closings due to high bacteria levels.

The completion of the pipe, and its extension northward in the coming years, will not only result in overflow getting treated for bacteria, but for nitrogen too, Samons said.

Warwick, viewed as a direct source of pollution to Greenwich Bay, also deserves credit for improvements, Liberti said. Its wastewater treatment plant has undergone improvements and efforts have been made to extend sewers into the area and to eliminate cesspools and septic systems.

“I know that Warwick has come a long way,” Liberti said, but he adds, “it continues to be an issue locally to get people to connect.”

**While substantial progress** is being made, it’s far too premature to declare victory, those interviewed for this article say.

There are still plenty of avenues for nitrogen to reach the Bay, including from wastewater treatments plants upstream in Massachusetts. Also, runoff still flows directly into the Bay carrying fertilizer and animal waste. And efforts to require the replacement of all cesspools in the state — not just those on the coast — have gone nowhere at the State House.

“It’s something we know how to do,” Kutcher said. “It just takes a lot of political will and money.”

There are, however, mysteries that persist about the Bay, low-oxygen conditions and fish kills. Kutcher said he has heard scientists wondering about what level of nitrogen reduction has to be reached — and how much time has to elapse — before a noticeable and consistent reduction in low-oxygen episodes is achieved.

Deacutis said there could be factors, including how Bay currents and flows from tributaries work, that play a role scientists don’t quite understand. Climate change could be another variable since warming waters hold less dissolved oxygen, he said.

“Some years are really good and some are really bad,” he said. “We’re trying to understand why.”

Monitoring and further study is vital, he said. The Insomniacs, who now go out in daylight and call themselves the Daytrippers, were fortunate to receive financing for rapid testing in 2005 that allowed them to drop from seven boats to three. They monitor nearly 70 spots about every two weeks.

Meanwhile, the Bay Assessment and Response Team, overseen by DEM, monitors a network of fixed stations that has grown to 13, each reporting data on Bay conditions every 15 minutes.

It’s these programs that detected some of the worst low-oxygen conditions in years in the Bay this summer, conditions that may have even been worse were it not for nitrogen-reduction efforts, Deacutis said.

“We think there is a decrease in the volume of water that’s going hypoxic [low oxygen],” he said, “but we have limited data.”

Deacutis is concerned that monitoring could be scaled way back due to rising budgetary pressures and people thinking that the problem is gone.

“As a scientist I get appalled at that,” he said. “What if you only measured the stock market once a month? Environmental things are as wild and crazy as economic ones.”

Looking back on the fish kill, Torgan said it may actually have been good for the Bay.

“Sometimes to get people’s attention on these issues, it takes a crisis to open that window of opportunity to change policy and the political course, to make investments and the big decisions,” he said. “It’s a real success story.”



## **KENNETH BERWICK: MY IDEA FOR FIGHTING POLLUTION**

Published: August 27 2013 02:47

The numerous beach closings in Rhode Island this year have been caused mainly by combined sewage overflows (CSOs) at sewage treatment plants and groundwater runoff. There are ways to greatly reduce these pollution problems.

Senesco Marine, a company located at Quonset Point, has the expertise to build large, rectangular tanks to store CSOs and groundwater runoff during rainy weather. These tanks could be built at Quonset and floated to each sewage treatment plant and installed in below-ground level concrete foundations. These tanks would end up 20 to 25 feet below ground level.

Next, Horizontal Directional Drilling (HDD) could be used to drill pipe lines along the streets in Rhode Island's coastal and riverside areas to collect groundwater runoff. Because HDD does not require the digging of trenches, construction would proceed rapidly with few traffic disruptions and minor community inconvenience. Storm drains and catch basins would be installed along each street to channel the runoff to the new pipe lines.

Storm drain and catch basins systems do not have to be connected to homes and businesses. In addition, the number of storm drains and catch basins on each street would be small and the number of wastewater storage tanks needed would also be small, probably less than 20.

Kenneth Berwick  
Smithfield



## Chafee tours storm water overflow tunnel



- [Combined Sewer Overflow Project](#)

PROVIDENCE -

Crews working deep under Providence are digging miles of tunnels to divert storm water and protect Narragansett Bay from pollution — an effort that Gov. Lincoln Chafee calls "the biggest project you'll never see."

On Tuesday, the Democratic governor donned safety goggles and a hard hat before being lowered 220 feet down a shaft to the tunnel's floor, where crews have already blasted through thousands of feet of bedrock. Chafee said he wanted to see the huge undertaking firsthand.

"It's just a monstrous project," Chafee said. "It's a solution to a problem that seemed unsolvable. We had to fix it. The engineering, what human beings can do, is really amazing."

When complete, the elaborate system of subterranean tunnels will divert and store water from storms to prevent it from overwhelming sewage treatment plants and sending significant amounts of pollutants into the bay. Once the rain stops, pumps will bring the storm water to the surface when it can be safely treated at the sewage plant.

With a price tag expected to surpass \$1 billion, the project is one of the largest public works efforts in state history.

The work is being done by the Narragansett Bay Commission to comply with federal clean water mandates. The cost is being funded through sewer bills. While he acknowledges the hefty price tag, Chafee said the benefit to the state's environment and the economy will be worth it.

Tourism and the state's shell fishing industry all depend on the quality of Narragansett Bay. Beach closures and shell fishing restrictions are a common occurrence in Rhode Island after heavy rains.

Crews using giant boring machines have already completed the first phase of the project, which cost \$350 million and involves a three-mile, 26-foot diameter stretch of tunnel under Providence.

Since that tunnel went online in 2008, more than 5 billion gallons of runoff has been captured and treated. When finished, the project aims to cut the number of overflows from 71 per year to four per year and reduce the amount of contaminated water going into the bay by 98 percent.

The project's second phase — with a \$250 million price tag — is expected to be completed in about a year, according to Ray Marshall, executive director of the Narragansett Bay Commission. The third phase is expected to cost another \$600 million and won't be completed until 2017.

Planning for the project began more than two decades ago and work began in 2001.

## DEEP UNDER PROVIDENCE, PROGRESS ON OVERFLOW TUNNEL / VIDEO

Published: December 03, 2013 05:42 PM

Comments



THE PROVIDENCE JOURNAL / BOB BREIDENBACH

More than 240 feet below the surface, Governor Chafee, left, and Gilbane / Jacobs lead tunnel inspector Scott Early watch the face of the tunnel being bored for explosives that will be set off to lengthen the tunnel.



By Alex Kuffner

Journal staff writer

akuffner@providencejournal.com

Published: December 03 2013 05:42

### **Updated 11:15 p.m.**

PROVIDENCE, R.I. -- Inside a dark, wet tunnel far below Olneyville, a construction crew is working on a project that will help keep Narragansett Bay clean.

The men use a single boom drilling jumbo, a sedan-sized machine with an extending arm to sink deep holes into the shale wall ahead of them. They will drill 40 holes in a circular pattern and then pack each one with dynamite.

The workers go through the painstaking process known as “drill and shoot” twice a day, slowly extending the tunnel, 8 feet per blast, 16 feet per day.

“It’s a continuous cycle, day in, day out,” said Brendan Ennis, project engineer with Gilbane-Jacobs, the joint venture that is managing the project.

This is how the Narragansett Bay Commission is building a key part of a system of pipelines and tunnels to contain contaminated storm water that inundates Providence’s century-old sewer system during heavy rains.

### **PROVIDENCE JOURNAL VIDEO BY BOB BREIDENBACH**

It has become the biggest public works project in Rhode Island history, a series of improvements that could take nearly two decades to complete and cost more than \$1 billion. On Tuesday, Governor Chafee got a first-hand look at the scale of the work.

Because construction is deep underground, it’s something many people don’t even realize is taking place, he said.

“A huge amount of construction work, mining work, and you’ll never see it,” the governor said.

The pipelines beneath Providence’s streets were originally designed to carry both sewage and storm water to the commission’s treatment facility at Fields Point before flowing into the Bay.



But when enough rain falls in a short period of time, the system becomes overtaxed and dirty water spills into the upper reaches of the Bay before it can be cleaned up. The overflows were once estimated at 2 billion gallons a year.

Following passage of the federal Clean Water Act in 1972, the Environmental Protection Agency ordered Providence to fix the problem. Planning started in the 1990s and ground was broken on the Combined Sewer Overflow Project in 2001.

The first phase of the project — a 3-mile-long, 300-foot deep tunnel beneath the city — was completed in 2008. The tunnel is able to capture nearly 65 million gallons of runoff at any one time and store it until it can be pumped to the Fields Point Wastewater Treatment Facility. Over the past four years, the 26-foot-wide tunnel has prevented 5.5 billion gallons of untreated storm water from reaching the Bay.

The second phase of the project is now under way, with pipes being installed under neighborhoods along the Woonasquatucket and Seekonk rivers, which both empty into the Bay. The two new pipeline systems will eventually connect to the previously-completed tunnel that stretches to Fields Point.

Construction crews have already laid sections of pipe around northern Hope Street and Blackstone Boulevard. They are still working in the neighborhood around Miriam Hospital.

In Olneyville, workers are busy building a 2.5-mile interceptor tunnel that parallels the Woonasquatucket River. Running between 10 and 35 feet underground, the tunnel travels from Sheridan Street along parts of Manton Avenue and Valley Street before emptying into a drop shaft between Rathbone and Hemlock streets.

The shaft falls 220 feet through sand and stone to a 10-foot wide horizontal tunnel that will serve as the primary connection on the West Side to the main storage tunnel.

On Tuesday afternoon, Chafee stepped into a metal cage that a crane lowered into the shaft. Joined by officials from the commission and reporters, he splashed through ankle-deep water down the 1,177-foot-long portion of the tunnel that has been completed.

The walls were rough and wet. They will be lined with pipe but, for now, they are stabilized with spray-on concrete. Ten-foot long rock bolts help keep the ceiling from caving in.

After each blast, a loader collects the rock and mud and carries it back to the bottom of the shaft. It's dumped into a muck box that the crane pulls up to street level.

The tunnel crews from Shank Balfour Beatty have another 623 feet to go before they're finished. The \$60-million project — the largest part of phase two — will be completed in August.

"These guys are moving along really well," said Scott Early, chief tunnel inspector for Gilbane-Jacobs.

Chafee described the work as "impressive." Asked why the improvements are necessary, he said the project will benefit shellfishermen, boaters and other users of the Bay.

"It's all about the water quality in Narragansett Bay," he said. "We just had to separate the storm water from the sewage. And this is the best way to do it."

Even when the second phase is finished at the end of 2014, the project won't be entirely done. The commission is planning a third series of upgrades that will take place farther up the Seekonk River and will divert runoff from Pawtucket and East Providence to a treatment facility at Bucklin Point.

The first phase is estimated to have captured 40 percent of storm water overflows and the second phase an additional 20 percent. The third phase will bring the total to 98 percent.

The storm water problems in Providence are typical of older systems, like those in Boston, Hartford and Cleveland, said Ray Marshall, executive director of the commission.

"They all have the same issues," he said. "We're in the first wave of making improvements."



environment

## Chafee to inspect sewer project, now halfway through Phase II



COURTESY NARRAGANSETT BAY COMMISSION/PETER GOLDBERG  
GOV. LINCOLN D. CHAFEE will inspect the Narragansett Bay Commission's \$1 billion Combined Sewer Overflow Project on Tuesday. Above, a photo of the microtunneling machine used in Phase II of the project for the construction of two pipes along the Seekonk and Woonasquatucket rivers.  
Photo

By Rhonda Miller  
PBN Staff Writer

Posted 12/3/13  
Development

PROVIDENCE – Gov. Lincoln D. Chafee is scheduled to go underground in a small cage elevator Tuesday to get a close-up view of progress on the Narragansett Bay Commission's \$1 billion Combined Sewer Overflow Project.

The three-phase project began in 2008 and is now at the halfway point of Phase II, said Narragansett Bay Commission spokeswoman Jamie Samons.

The federally mandated project is a result of the Clean Water Act passed in 1972 to establish fishable and swimmable standards for all navigable waters. Rhode Island's system of combined sewage and stormwater discharge, built in the 1800s, had to be upgraded to meet the requirements of the Clean Water Act.

"The discharges now drop into the tunnel and then the water in the tunnel is conveyed to a wastewater treatment facility," said Samons.

The Combined Sewer Overflow Project has captured and treated 5.5 billion gallons of combined sewage and rainwater since 2008, which has led to significant water quality improvements in Narragansett Bay, said Samons.

Phase II of the project will build two smaller pipes, one along the Seekonk River and one along the Woonasquatucket River, that will be used to transport more overflow sewage into the big tunnel and the storage tanks. Its cost is estimated at about \$250 million.



## PROVIDENCE WIND TURBINES CHURN OUT MORE POWER THAN PROJECTED



Mary Murphy/The Providence Journal

The three wind turbines at the Narragansett Bay Commission's Fields Point wastewater-treatment facility are seen in October 2012.



By ALEX KUFFNER

Journal Staff Writer

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Published: December 29 2013 11:20

PROVIDENCE — In their first year of operation, the three wind turbines on the city's waterfront outpaced expectations, producing a little more power than was originally projected.

The trio of 1.5-megawatt turbines generated 41.6 percent of the power used at the at the <NO,2013/12/29/18/48/3,Edmonds/c Christopher>Narragansett Bay Commission's <NO>Fields Point wastewater-treatment facility are seen in October 2012. from Dec. 4, 2012, to Dec. 22, 2013. When the commission installed the Chinese-made turbines, they were expected to provide 40 percent of the energy needed at the treatment plant, the largest in the state.

"We're meeting our goals," said Jamie Samons, spokeswoman for the nonprofit commission.

In some months, the turbines have generated more than half the power at the facility, which treats wastewater from Providence, Johnston, North Providence and parts of Lincoln and Cranston. In November, the number was 52 percent. Last March, it hit the upper 50s.

That made up for the summer months when the wind wasn't blowing as much and the turbines weren't producing as much power.

The 41.6-percent figure is the average over the first 12 months of operation. In that time, the turbines produced 6,700 megawatt-hours of electricity.

The turbines, manufactured by Goldwind, of China, stand 364 feet tall when their blades are at the highest points. They are the tallest in Rhode Island, and their location between the Providence River and Route 95 is arguably the most prominent in the state.

At 1.5 megawatts each, they are also tied for the most powerful turbines in the state. A turbine in North Kingstown that was also made by Goldwind has the same capacity, as does the turbine at Portsmouth High School that broke down last year and has yet to start spinning again.

Samons said that the commission's turbines haven't experienced any serious technical problems that have halted operations. That may be partly because they are direct-drive turbines that do not rely on gearboxes. The Portsmouth High School turbine's problems were caused by a faulty gearbox.

There also have been no complaints about how they look, according to Samons. The visual impact may be minimal because of where they were installed: a wastewater-treatment plant in an industrial section of the city next to a busy port. There are houses in the area, but not in the immediate vicinity of the turbines. Shadow flicker, Samons said, seems to affect only the commission's building.

The commission spends \$4 million a year to power the pumps and filtration systems at Fields Point and a second treatment facility at Bucklin Point in East Providence. It invested in the turbines as a way to save money. The commission is also considering a biogas project and a solar farm at Bucklin Point.

The three turbines were expected to shave \$1 million off the \$2.5-million annual electric bill at Fields Point. The savings are initially being used to pay off bonds that funded the \$12-million project. Once the money is repaid in 11 years, the turbines are projected to essentially provide free power. The turbines have a life expectancy of 20 to 25 years.

It took seven years of planning and permitting before the commission could install the turbines. They went up in February 2012, but it took another eight months to get them connected to the power grid and several more weeks to get them tested and spinning.

Until recently, the grid connection was limited, restricting the capacity of the turbines for nearly their entire first year of operation to 900 kilowatts rather than their full 1.5-megawatt potential, said Samons. The interconnect was upgraded a few weeks ago, and the turbines are expected to be operating at full output by next week.

But even at less than two-thirds capacity, the turbines performed better than expected.

"It bodes well for the future," Samons said.

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



## NARRAGANSETT BAY COMMISSION

# Perfect Compliance

*in recognition of Significant Industrial User Perfect Compliance in 2012*

**The Narragansett Bay Commission recognizes these Significant Industrial User companies for perfect regulatory compliance with Pretreatment Program regulations during 2012:**

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Austin Metal Finishing, Inc.  
Eastern Color & Chemical Company  
General Cable Industries, LLC  
Induplate, LLC  
Metallurgical Solutions, Inc.  
Providence Journal Company  
- Production Facility  
Tanury Industries, PVD, Inc.  
Truex, Inc.

AG&G Incorporated  
Darlene Group, Inc.  
Electrolizing, Inc.  
Impco, Inc.  
Mahr Federal, Inc.  
Pilgrim Screw Corporation  
Providence Metallizing Company, Inc.  
Stackbin Corporation  
Technodic, Inc.  
Univar USA, 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. Mesoella, Chairman • Raymond J. Marshall, P.E., Executive Director**  
**One Service Road, Providence, RI 02905 401-461-8848 • [www.narrabay.com](http://www.narrabay.com)**

The Narragansett Bay Commission

# PUBLIC NOTICE

## Firms in Significant Non-Compliance

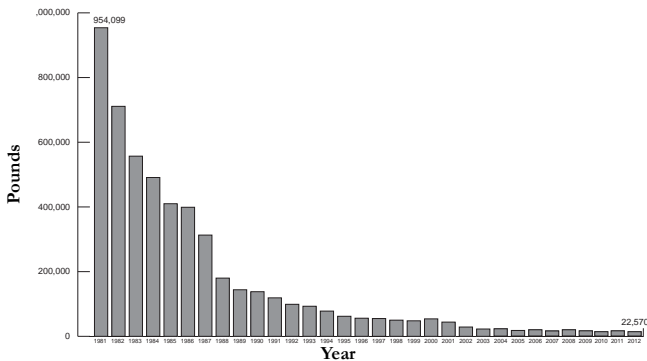


THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 C.F.R. 403.8(f) (2) (vii) and Article 10 of the Narragansett Bay Commission, Rules and Regulations require the NBC to publish annually the names of all industrial users in Significant Non-Compliance (SNC) with pretreatment standards and 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, 2011 through December 31, 2012. 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, 1981-2012**



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

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 97.6% and 98.6% respectively. Similar toxic loading reductions have been observed at the NBC Bucklin Point facility.

**Bucklin Point Service Area**

Company Name	Violations Cited	Present Status
<b>East Providence</b>		
Aspen Aerogels Rhode Island, LLC	Failure to submit reports on time (6)	Reports have been received.
<b>Cumberland</b>		
Teknicote, Inc.	Zinc (2) Failure to submit reports on time (6)	Firm is now in compliance. Reports have been received.
Precision Dermatology	Total Oil & Grease (1,2)	Firm is now in compliance.
Nuzzo Campoin Stone Enterprises, Inc.	Failure to submit report on time (6)	Report has been received.
<b>Lincoln</b>		
Denison Pharmaceuticals, Inc.	Total Toxic Organics (2) Zinc (2)	Firm is now in compliance.
Chemart Company	Silver (2)	Firm is now in compliance.
<b>Pawtucket</b>		
New England Linen Supply Company, Inc.	Total Oil & Grease (2)	Firm is now in compliance.

**Field's Point Service Area**

Company Name	Violations Cited	Present Status
<b>Johnston</b>		
Unique Plating, Inc.	Nickel (2)	Firm is now in compliance.
<b>Providence</b>		
Aluminum & Copper Recycling, Inc.	Failure to submit reports on time (6)	Reports have been received.
Bella's Jewelry	Failure to submit report on time (6)	Report has not been received.
Mark Precision, Inc.	Failure to submit report on time (6)	Report has been received.

The Narragansett Bay Commission will continue to lead in wastewater treatment, environmental protection, and environmental education to ensure a cleaner Narragansett Bay for all to enjoy.

Vincent J. Mesoilella, *Chairman* • Raymond J. Marshall, P.E., *Executive Director*  
 Narragansett Bay Commission • One Service Road • Providence, RI 02905  
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## Construction Update: East Side of Providence, Jan. 2013

### Construction Update: East Side of Providence, Jan. 2013

[Post Details](#)

Posted January 11, 2013

Filed under [General](#)

It's been a busy construction year for the Narragansett Bay Commission on the East Side, and we appreciate your patience as we worked to upgrade the water and wastewater infrastructure in your neighborhood. Ultimately all of this work will improve the quality of our urban rivers and Narragansett Bay.

Here's an update on the major projects currently underway in the Summit Neighborhood.

Contract 303.05

Where: Hope Street from Glendale to Chace Ave.

Exeter St., 5<sup>th</sup> Street between Hope & Bayard

7<sup>th</sup> Street between Hope & Brewster,

Overhill Rd.,

Ogden St.

Methyl St.

8<sup>th</sup> St. between Hope & Brewster

9<sup>th</sup>, 10<sup>th</sup> & 11<sup>th</sup> Streets between Hope & Top St.

Chace Ave between Hope Street & Chace Dr.

North Ave.

Hartshorn Rd.

Blackstone Blvd.

Magellan St.

Slater Ave.

Rochambeau Ave.

What happened: The Contractor has installed virtually all main line piping, drainage manholes and water mains in the Contract. This includes:

- new storm drains, ranging in size from 12" to 30", are 100% complete (15,798 linear feet)
- new drinking water pipes, ranging in size from 6" to 8", are 100% complete (6,000 linear feet)
- drainage manholes are >90% complete (101 of 111 complete)
- catch basins are >90% complete (126 of 136 complete)

Ten catch basins with pipe connections to manholes still need to be connected and ten manholes need to be reconstructed. The contractor will complete these this winter as the weather allows.

What's next: In the spring, paving and restoration crews will mobilize to complete sidewalks, reset curbing and perform final paving.

Contract 303.06

Where: North Main Street from Colonial to Hillside

Cemetery St.

Frost St.

Nashua St.

Concord St.

Matilda St.

### White St.

What happened: For the most part, the Contractor worked overnight on North Main Street throughout the spring, summer and fall, as it is a primary alternative to I-95. The Contractor worked two crews (day shifts) in side streets off North Main Street, one crew installing catch basins and connecting pipe, the other crew completing temporary pavement and general cleanup (moving equipment and material off site). To date:

- new storm drains are approximately 75% complete
- new drinking water pipes are 75% complete
- catch basins 50% complete
- drainage manholes 80% complete
- river headwall 100% complete

What's next: Although the Contractor will not work in North Main Street for the winter season, work will continue in the structures in side streets if weather allows. In the spring, paving and restoration crews will mobilize to complete sidewalks, reset curbing and perform final paving on all areas affected by construction.

### Contract 303.07

Where: Colonial Rd, Dexterdale Rd, Edgehill Rd, Stenton Ave, from North Main St. to Summit Ave.  
2<sup>nd</sup> and 3<sup>rd</sup> from No. Main St. to Highland Ave.  
4<sup>th</sup> St. from North Main St to Bayard St.  
Summit Ave from 4<sup>th</sup> to Exeter St.  
Lauriston St. and Burlington St. from Brewster St to Bayard St.

What's happened: National Grid has completed much of the gas main relay within the contract's limits and is installing service connections and tie-in connections between new and old mains.

What's next: Advertise/Bid/Contractor selection between January and April. Construction starts in July, completed in early 2015.

### Contract 303.08

Where: Miriam Hospital Area  
5<sup>th</sup> & 6<sup>th</sup> Sts. between Brewster and North Main St  
7<sup>th</sup> St. between Summit and North Main St.  
8<sup>th</sup> St. between Highland and North Main St.  
10<sup>th</sup> St. between Highland and North Main St.  
Chace Ave. between Highland and North Main St.  
Greaton Dr.  
Summit Ave. between 6<sup>th</sup> and 7<sup>th</sup>.

What's happened: The Narragansett Bay Commission Board of Commissioners approved the award of this contract at the December 2012 Board Meeting.

National Grid has completed the gas main relay within the Contract limits and is installing service connections and tie-in connections between new and old mains.

What's next: The Contractor will mobilize in April to start installing new storm drains, catch basins, and manholes. This contract is slated for completion in early 2015.

Have additional questions about construction? Contact [nbcpr@narrabay.com](mailto:nbcpr@narrabay.com).

#### AT YOUR SERVICE

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## Narragansett Bay Commission Employees Honored by New England Water Environment Association

### Narragansett Bay Commission Employees Honored by New England Water Environment Association

[Post Details](#)

Posted February 25, 2013

Filed under [General](#)

Three employees of the Narragansett Bay Commission received awards from the New England Water Environment Association (NEWEA) for excellent service in the operation and maintenance of wastewater treatment facilities.

Thomas Ciolfi received the NEWEA Operator Award for Rhode Island. The NEWEA Operator Award is given annually to an individual who has shown a high interest and performance in wastewater operations and has made a significant contribution to the wastewater field.

Paul Nordstrom received the E. Sherman Chase Award, which recognizes notable or meritorious accomplishments and career contributions to the profession.

Peter Trombetti received the Alfred E. Peloquin Award, which recognizes an individual whose personal service has contributed to excellence in plant operations either directly at a treatment plant, or indirectly through assistance to plant operations personnel.

The Narragansett Bay Commission and these three employees were recognized with this honor at the 2013 NEWEA Annual Conference on Wednesday, January 30, 2013 at the Boston Marriott Copley Place Hotel in Boston, Massachusetts.

The Narragansett Bay Commission owns and operates Rhode Island's two largest wastewater treatments facilities and provides wastewater collection and treatment services to 350,000 people in the metropolitan Providence area and Blackstone Valley. For more information on the Narragansett Bay Commission's excellent service in operation and maintenance of their wastewater treatment facilities, contact the Public Affairs Office at (401) 461-8848 ext. 377, or visit us at [www.narrabay.com](http://www.narrabay.com).

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# Narragansett Bay Commission

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Narrabay > News > 2013 > February > NACWA NEAA

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## Narragansett Bay Commission Honored with NACWA National Environmental Achievement Award

### Narragansett Bay Commission Honored with NACWA National Environmental Achievement Award

Post Details

Posted February 25, 2013

Filed under [General](#)

The Narragansett Bay Commission has received a National Association of Clean Water Agencies (NACWA) National Environmental Achievement Award Excellence in Public Information and Education. NACWA's Public Information and Education Awards are presented for outstanding programs in video, printed publications, educational programs, or e-media.

The Narragansett Bay Commission was selected for this honor for the SNAPSHOT of the Bay website. SNAPSHOT of the Bay features real-time and historical water information on upper Narragansett Bay, including weather, tidal and water quality data. SNAPSHOT of the Bay allows the public to view and download Bay and river monitoring data and also features photos of fish caught north of Conimicut Point. To view NBC's SNAPSHOT of the Upper Narragansett Bay visit <http://snapshot.narrabay.com/app/>.

The Narragansett Bay Commission owns and operates Rhode Island's two largest wastewater treatments facilities and provides wastewater collection and treatment services to 350,000 people in the metropolitan Providence area and Blackstone Valley. For more information on the Narragansett Bay Commission's award-winning contributions to environmental protection and wastewater management, contact the Public Affairs Office at (401) 461-8848 ext. 377, or visit us at [www.narrabay.com](http://www.narrabay.com). National Environmental Achievement Awards are sponsored by the National Association of Clean Water Agencies, Washington, DC.

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## Neighborhood Meeting about Hope Street Paving, 4/1/13

### Neighborhood Meeting about Hope Street Paving, 4/1/13

March 25, 2013

[Post Details](#)

Posted March 25, 2013

Filed under [General](#)

Dear Neighbor:

As you know, over the past months we've been working on Hope St. installing pipes for Phase II of Narragansett Bay Commission's Combined Sewer Overflow (CSO) Abatement Program. To date, the pipes have stopped close to 5 billion gallons of sewage from moving into Narragansett Bay.

With that phase of project construction in the area now complete, we'll soon be starting curb-to-curb repaving along Hope St., including replacement of some of the sidewalks. Repaving will begin in April and is expected to take several weeks. Local traffic and accessibility will be impacted, and we'd like to answer your questions about these street and sidewalk improvements and provide you with information on what to expect during this time to minimize disruption.

We'll be having a one-on-one informational meeting on Monday, April 1 at 7:15 p.m. at the Church of the Redeemer on 655 Hope St., and we hope you'll join us. If you're interested in learning more about the project, please visit [www.narrabay.com](http://www.narrabay.com), [www.Facebook.com/narrabay](http://www.Facebook.com/narrabay), follow us on twitter @narrabay, or call the Narragansett Bay Commission Public Affairs office at 401-461-8848.

Thank you for your continued patience and support as we work to keep our water clean.

Sincerely,

Vincent Mesoella, Chairman  
Narragansett Bay Commission

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## NBC Receives United Health Wellness Award

### NBC Receives United Health Wellness Award

Post Details

Posted April 05, 2013

Filed under [General](#)

The Narragansett Bay Commission is one sixteen organizations nationwide to received UnitedHealthcare's "Well Deserved" award for 2012, an annual honor given to employers who demonstrate an exceptional commitment to helping their employees improve their health and well-being by investing in worksite wellness programs.

Chronic diseases – such as heart disease, stroke, cancer, diabetes and arthritis – are among the most common, costly and preventable health problems. The use of effective workplace programs and policies may reduce health risks and improve the quality of life for millions of people across the United States, while reducing health care costs to individuals and employers, according to the Centers for Disease Control and Prevention.

More businesses are adopting wellness programs as a way to help improve employee health and productivity, reduce absenteeism, build a culture of health within their organization and better manage health care costs. Wellness Councils of America estimates that a \$1 investment in a comprehensive wellness program saves an average of \$3 to \$5 in health care costs.

"This year's 'Well Deserved' award winners are leaders in improving the health of their employees and their families while reducing health care costs," said Carol Calvin, RN, MS, CPQH, national director of UnitedHealthcare Health and Wellness. "These employers are empowering their employees to make positive health care decisions by providing innovative and creative ways to encourage a healthy lifestyle. It's an honor to recognize their notable achievements."

The "Well Deserved" award program was designed to recognize employer customers that have implemented successful wellness programs and to reinforce UnitedHealthcare's mission of helping people live healthier lives. An external broker review panel reviewed and judged the applicants.

The Narragansett Bay Commission's wellness programs offers employees incentives for preventive health screenings, smoking cessation, physical activity, and other healthy lifestyle activities.

NBC Executive Director Ray Marshall accepted the award at a ceremony on Friday, April 5. The award includes a \$1000 cash prize that the Commission may use for employee wellness programs and activities.

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## NBC Earth Day Grant Program Funds Local River Clean Ups

### NBC Earth Day Grant Program Funds Local River Clean Ups

Post Details

Posted April 12, 2013

Filed under [General](#)

The Narragansett Bay Commission (NBC) is enhancing Earth Day activities in its service area communities by providing grant funding and support for community-organized Earth Day River Clean-ups. Local organizations conducting Earth Day cleanups around water bodies within NBC district were encouraged to apply to the NBC in order to receive grant awards up to \$1,000 for their 2013 Earth Day event.

The NBC received twenty-three applications, and chose nineteen different Earth Day projects to receive funding. The grant funds come from NBC's environmental enforcement fund, which consist of fines paid by environmental violators and designated in the NBC's enabling legislation for community improvement and environmental education projects. "Over the past few years we have received many requests to help clean up other areas of our state. The New Earth Day Grant Program will allow NBC to assist with the clean-up of many vital environmental habitats, while supporting many local groups in our service area," noted Tom Uva, Director of Planning, Policy and Regulation at NBC.

Grant recipients include: Central Falls Parks & Recreation, Save the Bay, Inc., Woonasquatucket River Watershed Council, City of East Providence, Keep Blackstone Valley Beautiful/Friends of the Blackstone, Neighborhood Alliance of Pawtucket/Friends of the Moshassuck, Blackstone Valley Community Action Program, Cumberland Land Trust, Neutaconkanut Hill Conservancy, Inc., Friends of India Point Park, City of Providence, Serve Rhode Island, Smithfield Conservation Commission, Edgewood Waterfront Preservation Association, East Providence Police Cadets, Crescent Park Carousel Commission, and Miss Rhode Island Scholarship Program.

The Narragansett Bay Commission owns and operates Rhode Island's two largest wastewater treatments facilities and provides wastewater collection and treatment services to 350,000 people in the metropolitan Providence area and Blackstone Valley. For more information on the Narragansett Bay Commission's award-winning contributions to environmental protection and wastewater management, contact the Public Affairs Office at (401) 461-8848 ext. 394, or visit us at [www.narrabay.com](http://www.narrabay.com).

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## NBC Board of Commissioners Re-elect Leadership

### NBC Board of Commissioners Re-elect Leadership

Post Details

Posted April 12, 2013

Filed under [General](#)

On April 2, 2013 at The Narragansett Bay Commission's (NBC) monthly board meeting the Board of Commissioners unanimously re-elected Vincent J. Meselella to a twenty-third term as Chairman of the state's largest wastewater treatment authority. Also re-elected were Angelo Rotella of Providence as Vice Chairman and Robert Andrade of Pawtucket as Treasurer.

Meselella is a charter member of the Commission, having served since its inception in 1980. The NBC has won numerous state and national awards for its treatment performance and environmental initiatives with Meselella's guidance. In 2012, the NBC became one of the first wastewater treatment agencies in the nation to construct and operate wind turbines, providing a sustainable source of energy for the agency's clean water operations. In addition NBC has also completed the last twenty-one fiscal years under budget and has recently been reconfirmed by the Standard & Poor's rating agency with a AA- financial rating. The NBC is currently in phase II of Rhode Island's largest public works project the CSO project, which will virtually end wet weather related sewage discharges to Upper Narragansett Bay.

Those re-elected thank the Board for their voice of confidence and pledged to the Board and staff continued diligence to protect the agency and its ratepayers.

The Narragansett Bay Commission owns and operates Rhode Island's two largest wastewater treatments facilities and provides wastewater collection and treatment services to 350,000 people in the metropolitan Providence area and Blackstone Valley. For more information on the Narragansett Bay Commission's award-winning contributions to environmental protection and wastewater management, contact the Public Affairs Office at (401) 461-8848 ext. 394, or visit us at [www.narrabay.com](http://www.narrabay.com).

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Narrabay > News > 2013 > April > Hope Street Traffic Detours to Begin April 15

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## Hope Street Traffic Detours to Begin April 15

### Hope Street Traffic Detours to Begin April 15

Post Details  
 Posted April 12, 2013  
 Filed under [General](#)

The traffic detour related to the Narragansett Bay Commission's repaving of Hope Street from Glendale Avenue to Chace Street will begin on Monday, April 15. Hope Street will be restricted to one-way traffic travelling south for the duration of the project. Southbound traffic on Hope will travel in the northbound lane. Northbound traffic will be redirected to Blackstone Boulevards via Rochambeau. Access from side streets to Hope Street will be limited while the concrete base of the southbound lane is replaced. The detour will remain in place until the end of June.

The repaving follows installation of new storm sewers, gas lines and water lines in conjunction with Phase II of the Narragansett Bay Commission's Combined Sewer Overflow Abatement Project. Phase I of the CSO Project has already prevented over five billion gallons of storm-related sewage overflows from entering Narragansett Bay.

Regular updates of progress will be posted on the Narragansett Bay Commission's Facebook page ([www.facebook.com/narrabay](http://www.facebook.com/narrabay)) and twitter feed (@narrabay).

A full report on Hope Street repaving is available [here](#).



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# Narragansett Bay Commission

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Narrabay > News > 2013 > April > NWPCA Award

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## Narragansett Bay Commission Earns Most Efficient Large Secondary Treatment Plant Award

### Narragansett Bay Commission Earns Most Efficient Large Secondary Treatment Plant Award

Post Details

Posted April 18, 2013

Filed under [General](#)

The Narragansett Bay Commission's Field's Point Wastewater Treatment Facility has received the Most Efficient Large Secondary Treatment Plant award for 2012 from the Narragansett Water Pollution Control Association (NWPCA). Field's Point is receiving this award for having no permit violations for the year 2012.

The award is based solely on permit compliance. The criteria include the number of permit violations for total suspended solids (TSS), biochemical oxygen demand (BOD) and fecal coliforms experienced as well as the yearly average TSS and BOD values added together.

Field's Point has received this award for the past four years and five times in the past six years. The award will be presented at NWPCA's Annual Awards Banquet at the Cranston Country Club on Thursday May 16th.

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## NBC's 500 Junior Scientists Celebrate Year-Long Environmental Activism

### NBC's 500 Junior Scientists Celebrate Year-Long Environmental Activism

Post Details

Posted May 09, 2013

Filed under [General](#)

On Friday, May 10, from 10:00 a.m. to 1:00 p.m., over 500 elementary school students, teachers and guests from nine Rhode Island schools will gather at Goddard Park in Warwick for an environmental education conference to culminate the Narragansett Bay Commission's year-long Woon Watershed Explorers environmental education program.

The NBC's Woon Watershed Explorers Program is an award winning hands-on water quality monitoring program, that gets elementary students and teachers "up close and personal" with the health of their local watersheds. The program encourages students and teachers to become stewards of the environment, specifically focusing on their local rivers, ponds, lakes and streams, and also Narragansett Bay.

Students from Sarah Dyer Barnes Elementary in Johnston, Anna McCabe Elementary in Smithfield, Kent Heights Elementary in East Providence, Agnes Little Elementary and Nathanael Greene Elementary in Pawtucket, Saylesville Elementary in Lincoln, Reservoir Avenue School in Providence and Centredale Elementary in North Providence, participated in the Woon Watershed Explorers Program this year.

On May 10, these nine schools will join NBC staff along with staff from Biomes Marine Biology Center, Save the Bay, Audubon Society of Rhode Island, and Mystic Aquarium for a day of environmental education activities. The students will start the day with presentations on macro invertebrates that they researched.

The goals of the NBC's Woon Watershed Explorers Program and the culminating environmental education conference are to help students connect the health of their local watersheds to the overall health of Narragansett Bay, and to inspire them to care for these precious resources so that future generations can enjoy them.

"My students have had the opportunity to participate in the Narragansett Bay Program for many years now. This program ties in directly with our third grade Science kit on water. NBC's lessons are always engaging and hands-on, and the students eagerly await their monthly lessons. My class is learning lifelong lessons about Earth's most precious resource-water!" explains Elizabeth Locklin, a 3rd grade teacher at Ashton Elementary School in Cumberland.

"The amount of real life science experience in which they are engaged on a monthly basis would be difficult to replicate in the classroom. The Narragansett Bay Commission WWE program is an authentic, hands-on, engaging experience for all of my students, and they look forward to each monthly lesson," says Debra Ramm, a 4th grade teacher at Sarah Dyer Barnes Elementary in Johnston.

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## NBC Approves Plan to Bury Power Lines

### NBC Approves Plan to Bury Power Lines

Post Details

Posted May 14, 2013

Filed under [General](#)

At its April meeting, the Narragansett Bay Commission Board of Commissioners approved a project to bury the power lines at the Commission's Providence campus.

The Board took into consideration the critical importance of the infrastructure at the NBC's Field's Point Wastewater Treatment Facility (FPWWTF) to the public health and environmental stability of Narragansett Bay.

Wastewater treatment facilities are amongst the largest users of electricity in the country. The FPWWTF is the largest in the state of Rhode Island and relies on a continuous supply of electricity. "It is critically important that NBC has reliable utility infrastructure, yet many of the utility poles on the NBC campus are very old," said Tom Uva, NBC's Director of Planning, Policy and Regulation. Should the poles or transmission lines fail in a storm, plant operations could face major problems, which might endanger the water quality in upper Narragansett Bay. "The state has faced some major storms within this past year like Hurricane Sandy and Winter Storm Nemo," Uva added, "and NBC wants to reassure that our utility infrastructure can withstand any storms in the future."

NBC has initiated this project to improve system reliability by removing the old utility poles located along Service Road and burying the transmission lines in an underground duct bank. NBC currently has the contract for the project out to bid and the bid opening is scheduled for May 22nd. NBC is looking to complete this project by winter.

The Narragansett Bay Commission owns and operates Rhode Island's two largest wastewater treatments facilities and provides wastewater collection and treatment services to 350,000 people in the metropolitan Providence area and Blackstone Valley. For more information on the Narragansett Bay Commission's award-winning contributions to environmental protection and wastewater management, contact the Public Affairs Office at (401) 461-8848 ext. 394, or visit us at [www.narrabay.com](http://www.narrabay.com).

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Narrabay > News > 2013 > May > Miss RI Contestants Beautify Seekonk River

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## Miss RI Contestants Beautify Seekonk River

### Miss RI Contestants Beautify Seekonk River

Post Details

Posted May 16, 2013

Filed under [General](#)

The Narragansett Bay Commission welcomes the contestants of the 2013 Miss Rhode Island Scholarship Program to the Bucklin Point Wastewater Treatment Facility on Saturday, May 18 for a community clean-up of the Seekonk River. Kelsey Fournier, Miss Rhode Island 2012, will lead the 2013 contestants as they beautify the river banks from 9:00 AM to 12:00 noon.

The clean-up is funded in part through the Narragansett Bay Commission's 2013 Earth Day River Clean Up Grant Program, which gave grants for community clean-ups to 21 local organizations. The Bucklin Point WWTF is located at 102 Campbell Avenue in East Providence. Directions to the site are available at [www.narrabay.com](http://www.narrabay.com). This event is open to the public.

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## NBC Kicks off Woon Watershed Explorers Program for 2013

### NBC Kicks off Woon Watershed Explorers Program for 2013

Post Details

Posted September 19, 2013

Filed under [General](#)

The Narragansett Bay Commission (NBC) kicks off September with its year-long Woon Watershed Explorers Environmental Education Program. The program educates and encourages students to become involved with the environment and consists of hands-on water quality monitoring that gets elementary students more aware of their local watersheds right here in Rhode Island. Environmental Education Coordinator Cynthia Morissette runs the program at NBC, visiting each participating school once a month. The curriculum includes two water quality testing field trips to their local watershed, a trip to one of NBC's wastewater treatment facilities, in class lessons and culminates in an environmental education symposium in May at Goddard Park.

NBC has approximately 500 students from ten different schools in the NBC service are. Schools participating in the program include Sarah Dyer Barnes Elementary in Johnston, Agnes Little Elementary in Pawtucket, Paul Cuffee School in Providence, Centredale Elementary in North Providence, Anna McCabe Elementary in Smithfield, St. Cecilia's School in Pawtucket, Kent Heights Elementary in East Providence, Ashton Elementary in Cumberland, and Meeting Street School in Providence.

"Since its pilot in 2002, the Narragansett Bay Commission's (NBC) environmental education program has grown leaps and bounds. The Woon Watershed Explorers (WWE) Program has expanded beyond the Woonasquatucket Watershed and into several other watersheds including the Blackstone and the Ten Mile," said program coordinator Morissette. "The number of schools has increased from 6 to 10 and the number of students from just over a 100 to over 500. I am extremely proud of what the WWE program has become and I am so impressed by the increased knowledge and sensitivity towards the importance of clean water the environment that each student walks away with each year. As I visit schools and see former students who remember visiting the NBC, completing the WWE program, and many of the concepts they learned, I am encouraged to continue educating. I truly hope that the NBC's WWE program acts as a springboard, launching these students into a life of environmental stewardship," Morissette added.

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## NBC Recognized with Platinum Award for Excellence in Management

### NBC Recognized with Platinum Award for Excellence in Management

Post Details

Posted October 02, 2013

Filed under [General](#)

The Narragansett Bay Commission (NBC) has received the Platinum Excellence in Management Recognition award from the National Association of Clean Water Agencies (NACWA), announced at NBC's September 24th Board of Commissioner's meeting.

The Excellence in Management Recognition Program recognizes public clean water that have implemented and sustained, successful programs that address the range of management challenges faced by public clean water utilities in today's competitive environment. NACWA is committed to clean water and a healthy environment and strives to help ensure that member agencies have the tools they need to meet these objectives. The Narragansett Bay Commission fulfills this commitment to clean water through its significant efforts over the past several years to maximize efficiency during an era of rising costs and ever expanding water quality challenges.

NBC has received recognition for this award for 3 years and is one of only three publicly owned treatment works in the United States to receive the 2013 Platinum designation.

The Platinum recognition is based on implementation of a total of nine of the Ten Attributes of Efficiency Managed Water Sector Utilities, and implementation of a total of four Resource Efficiency and Protection Activities. The Narragansett Bay Commission strongly focuses on these attributes of an effectively managed utility: product quality, financial viability, customer satisfaction, employee and leadership development, operational optimization, infrastructure stability, operational resiliency, community sustainability, stakeholder understanding and support, energy management and efficiency, water resources recycling and stormwater management, pretreatment, and biosolids/septage/residuals management. NBC strives to maintain a leadership role in the protection and enhancement of water quality in Narragansett Bay, providing safe and reliable wastewater collection, meeting all state and federal requirements, strong financial planning, a customer focused attitude, and attract, develop and retain highly qualified employees. The NBC's robust clean water initiatives, including its comprehensive Combined Sewer Overflow Abatement Program, nitrogen reduction facilities at both the Field's Point and Bucklin Point Wastewater Treatment Facilities, green energy initiatives such as the three 1.5mW wind turbines at Field's Point, an aggressive water quality monitoring in the urban rivers and upper bay, and a wide-reaching environmental education program, contributed to the agency's success in Excellence in Management Recognition Program.

"The Narragansett Bay Commission truly embodies the spirit of the Excellence in Management Recognition Program. It is an honor and an inspiration to showcase the achievements and commitment of this utility and those of our nation to America's waters," said Ken Kirk, NACWA's Executive Director.

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## STATE ENVIRONMENTAL MONITORING GROUP CITES FEARS OF REDUCED BUDGETS TO PROTECT R.I.'S NATURAL RESOURCES

### STATE ENVIRONMENTAL MONITORING GROUP CITES FEARS OF REDUCED BUDGETS TO PROTECT R.I.'S NATURAL RESOURCES

[Post Details](#)

Posted November 06, 2013

Filed under [General](#)

MEDIA RELEASE

FOR IMMEDIATE RELEASE NOVEMBER 06, 2013

CONTACT: Nicole Rohr (401) 874-4866 Ames Colt (401) 222-2700x7273

The state organization charged with monitoring the health of Rhode Island's environment has issued a report stating that possible reductions in funding from state and federal sources pose a risk to the state's natural resources. These reductions would also impact human health and the state's economy, the report maintains.

"Environmental monitoring is critical to determining not only the condition and trends of our natural resources, it also provides essential guidance for management of those resources," said Nicole Rohr, assistant director of the University of Rhode Island Coastal Institute, and chair of the R.I. Environmental Monitoring Collaborative, a part of the R.I. Bays, Rivers, and Watersheds Coordination Team (BRWCT) that released the report. "This is a science-based survey that shows where and when we need help in making sure we are protecting the health of citizens, and avoiding negative impacts on the economy. Failing to realize what needs to be monitored and assessed with regard to the protection and management of our natural resources will impose substantial costs to Rhode Island's economy, quality of life, and public health."

The R.I. Environmental Monitoring Collaborative's report warns that continuing cuts in state and federal funding for environmental monitoring will undermine the state's ability to adapt to changes in the environment that have a ripple effect in areas such as human health and the economy. For example, Rhode Island's beach monitoring program – that has a huge impact on tourism through the state's calling-card beaches – is totally dependent upon federal funding. Yet recent federal budgets have targeted those dollars for termination. The state currently has no money designated for the endangered program, that provides information on which beaches are safe for people and their families to swim.

"Environmental Monitoring tracks the 'vital signs' of our natural resources, just as doctors measure blood pressure to monitor and remedy individual health," said BRWCT chair Ames Colt. "Without keeping our finger on the pulse of Narragansett Bay, and the state's rivers, lakes and streams, we will never achieve the substantial economic and environmental benefits of cost-effective environmental management and sustainability. Monitoring enables the state to intelligently and efficiently manage our invaluable natural resources. Without adequate funding, both from the state and federal government, we will be at risk of managing blindly."

The 2012 Summary Report issued in September reflects a range of monitoring needs related to water quality, invasive species, shellfish growing areas, critical habitats, and shoreline change, among others. A R.I. Department of Environmental Management designee serves as a vice-chair of the Environmental Monitoring Collaborative, and many of these water-monitoring activities help the agency fulfill requirements of the federal Clean Water Act.

The R.I. Environmental Monitoring Collaborative will also continue to provide data to Watershed Counts, an initiative co-led

by URI's Coastal Institute and the Narragansett Bay Estuary Program in partnership with 60 agencies, NGOs, municipalities, and watershed councils, among others. Watershed Counts uses monitoring information to provide environmental indicators to reveal progress or lack thereof in the health and productivity of Narragansett Bay and its watershed.

"Wastewater treatment plants across the state have been spending millions of dollars to upgrade facilities to improve water quality, and it is critical that these expensive infrastructure upgrades are based upon sound science that can only be obtained by adequate monitoring," said Tom Uva, Director of Planning, Policy & Regulation for the Narragansett Bay Commission and vice-chair of the Environmental Monitoring Collaborative. "This comprehensive report clearly demonstrates the collaborative efforts of many agencies that work together to measure the health of Rhode Island's natural resources, and unfortunately it raises many concerns regarding future financing of many monitoring initiatives, initiatives that provide important answers to crucial questions needed to make sound decisions regarding our state's infrastructure projects and economic development."

Judith Swift, director of URI's Coastal Institute likens monitoring to home repairs. "Nobody gets excited about investing in a new roof, but it is fundamental to good health and our interior habitat. Environmental monitoring is the lifeblood of scientific research, and many years of uninterrupted data tell how our actions fuel trends."

The full Summary Report 2012 can be found at: <http://www.coordinationteam.ri.gov/envirocollab.htm>.

The R.I. Environmental Monitoring Collaborative is comprised of executive agencies, university-based programs, non-governmental organizations water-reliant economic development and other monitoring stakeholders. It establishes statewide priorities for environmental monitoring, maintains a Comprehensive Environmental Monitoring Strategy, coordinates monitoring field programs, and works with Watershed Counts to communicate findings and conclusions to the citizens of Rhode Island.

The Rhode Island Bays, Rivers, and Watersheds Coordination Team is a state interagency commission dedicated to the protection, management, restoration and sustainable utilization of Rhode Island's fresh and marine waters and watersheds. The BRWCT conducts strategic planning, fosters multi stakeholder partnerships, and invests in science, monitoring, data assessment, planning, and evaluation.

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## NBC Executive Director Ray Marshall is chosen to serve on Narragansett Bay Estuary Program Management Committee

### NBC Executive Director Ray Marshall is chosen to serve on Narragansett Bay Estuary Program Management Committee

Post Details

Posted November 27, 2013

Filed under [General](#)

The Narragansett Bay Commission's (NBC) Executive Director Raymond Marshall has been chosen to serve as the Rhode Island wastewater industry representative on the Narragansett Bay Estuary Program (NBEP) Management Committee. The NBEP Management Committee consists of top-level decision makers in Rhode Island and Massachusetts including environmental organizations, academic institutions, watershed groups, and key state and federal agencies.

The NBEP's mission is to protect and preserve Narragansett Bay and its watersheds in both Rhode Island and Massachusetts, through partnerships that conserve and restore natural resources, enhance water quality, and promote community involvement. The NBEP operates under the National Estuary Program which was established by The Federal Clean Water Act and is one of twenty-eight nationally designated programs to protect and restore the country's precious resources.

Marshall has served as NBC Executive Director since November 2006, after serving as Deputy Director since 1992. He has provided direct management for the agency's extensive construction activity, including Phases I & II of the \$600 million Combined Sewer Overflow (CSO) project, the \$65 million upgrade of the NBC's Bucklin Point Wastewater Treatment Facility, the \$60 million nitrogen reduction project at the Field's Point Wastewater Treatment Facility, and the construction of three 1.5 MW wind turbines to provide sustainable energy for the wastewater treatment process. Marshall has also coordinated the development of the agency's comprehensive Asset Management Program and Strategic Plan.

Marshall is a member of the Board of Directors for the National Association of Clean Water Agencies, was named Engineer of the Year by the Rhode Island chapter of the American Society of Civil Engineers in 2002, and in 2012 he received the Freeman Award from the Providence Engineering Society for professional excellence. He earned a B.S. from the University of Rhode Island in Civil Engineering, and a M.S. in Environmental Engineering from Northeastern University. He is a resident of Smithfield, Rhode Island.

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# ***NBC NEWSLETTERS***

# WOONY NEWS

December/January 2012/13

Wooty News is a bi-monthly newsletter produced by the Narragansett Bay Commission (NBC). It is geared towards helping students learn about and have a better appreciation for their environment. It includes fun activities, interesting facts, educational stories and more. Students can log onto [www.narrabay.com](http://www.narrabay.com) to read Wooty News, or sign up for a mailing list and receive a copy at home, by calling the NBC at 401-461-8848 x351. Students can also email Wooty with their questions at [Wooty@narrabay.com](mailto:Wooty@narrabay.com).

## Critter Spotlight

### Black Banded Wolly Bear

With a name like Wolly Bear, who wouldn't love this adorable little caterpillar. The Black Banded Wolly Bear, which transforms into the Isabella Tiger Moth (*Pyrrharcia isabella*) is an extremely interesting creature. From freezing in winter, to predicting the weather, this little insect is more than meets the eye.

Many people have seen a Wolly Bear Caterpillar, but few associate it with its adult form, the Isabella Tiger Moth. The graphic to the right shows each stage of metamorphosis except for the egg. While some caterpillars only live for a month before transforming into an adult moth or butterfly, Wolly Bears can live upwards of 14 years as larva.

This extreme critter can also freeze in the winter and thaw out in the spring. It has a special antifreeze in its body which help to coat its cell walls so that ice cannot get to them.

Lastly, it has been thought by many that the Wolly Bear caterpillar could predict the weather. Many believe that if the caterpillar's orange band is wide the winter will be mild and if it is thin the winter will be harsh. It looks like the groundhog has some competition!!



# Woon Watershed Explorers 2012/13

The Narragansett Bay Commission (NBC) is proud to welcome its 2012/13 Woon Watershed Explorers. Participants this year include:

Agnes E. Little Elementary: Pawtucket  
Anna McCabe Elementary: Smithfield  
Ashton Elementary: Cumberland  
Centredale Elementary: North Providence  
Kent Heights Elementary: East Providence  
Nathanael Greene Elementary: Pawtucket  
Reservoir Avenue Elementary: Providence  
Saylesville Elementary: Lincoln  
Sarah Dyer Barnes Elementary: Johnston

The mission of the NBC is to maintain a leadership role in the protection and enhancement of water quality in Narragansett Bay and its tributaries by providing safe and reliable wastewater collection and treatment services to its customers at a reasonable cost. Education plays a vital role in helping the NBC to achieve its mission. Through education children and adults better understand NBC's role in the community and have a better appreciation for clean water resources, a luxury that people often take for granted.

The WWE program provides elementary school students with an in-depth look into their local watershed, in the hopes that they will begin to understand just how precious water, and more importantly clean water is.

Through field trips and in-class visits themed around watersheds students are provided with valuable information to help them make educated decisions that positively impact their watershed. Everyone in the world lives in a watershed, yet ask anyone to define what a watershed is, and most cannot. At the start of the WWE program less than 1% of the students can define watershed and at the end about 75% of the students can define the term watershed and even more can name the watershed where they live.



WWE Invertebrate Project 2010



WWE Conference May 2012



WWE fall field trip 2010



# NBC Pipeline

January 2013

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 January*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		 1 New Year's Day Holiday	2	3	4 Payday	5
6	7 Application deadline for spring tuition reimbursement	8	9	10	11 Last day to purchase P-Bruins tickets	12
13	14	15	16	17	18 Payday	19
20	 21 Martin Luther King Jr. Day Holiday	22	23 5:00 PM CAC Meeting	24	25	26
27	28	29 11:00 AM Board of Commissioner's Meeting	30	31		

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

### Congratulations NBC!



NBC has won the National Association of Clean Water Agencies' 2013 National Environmental Achievement Award for the Snapshot website. The site provides real-time data on conditions in the Narragansett Bay as well as analysis and historical information from NBC's water quality scientists. Special recognition goes to the entire PP&R staff for conceptualizing and populating the site and to IT for turning the concepts into internet reality.

Thank you for all your hard work!





# News Briefs...

## Apple Cider Caramel Glazed Pound Cake

- 1 cup unsalted butter, at room temperature
- 1 cup shortening
- 3 cups granulated sugar
- 6 large eggs
- 3 cups all-purpose flour
- 1/2 tsp. salt
- 1/2 tsp. baking powder
- 3/4 tsp. cinnamon
- 1/2 tsp. nutmeg
- 1 cup apple cider
- 1 tsp. vanilla bean paste

Preheat oven to 325F. Grease an 8x4 inch loaf pan with baking spray.

Using a stand mixer with a paddle attachment cream together the shortening and butter. Add sugar 1/4 of a cup at a time. When all sugar is incorporated beat on medium-high speed for about 5 minutes. Add eggs one at a time, scraping down the bowl after every addition. Add the vanilla and beat another 30 seconds. Combine the flour, baking powder, salt, and spices in a medium bowl.

Starting with the flour mixture alternate adding the flour, then the cider, than flour, cider, and end with flour. Beat until all the ingredients are well combined. Tube pan bake for 90 minutes. Small loaves took about 70 minutes. Just watch your oven to make sure a knife inserted in middle of cake comes out clean.

### Caramel Glaze

- 1/2 cup granulated sugar
- 1/2 tsp. baking soda
- 1/4 cup unsalted butter
- 1/4 cup milk
- 1/4 cup Lyle's Golden Syrup (dark corn syrup can be used)
- 1 tsp. vanilla bean paste

Combine all ingredients in a medium sauce pan and bring to a boil. Boil for 10 minutes. Drizzle over cake while cake is still warm.



## Welcome!



Patrick McGuire  
Associate Legal Counsel

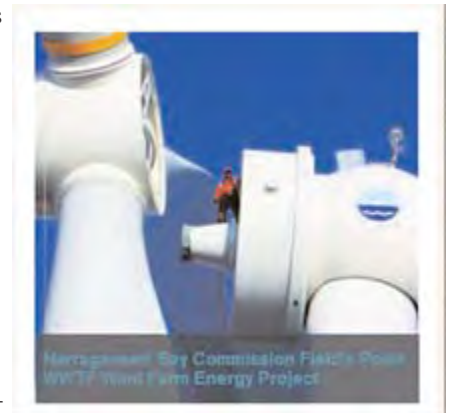
## Congratulations!

Congratulations to Tricia Ferrara and Jay Fabrizio who were married on December 15, 2012 in an intimate setting in Nashville's Music Row. The wedding was originally scheduled for the Fall of 2013, but they couldn't bear to wait that long to be together.



## Water & Wastes Digest Magazine "Top Projects" Award Winner!

The NBC's Field's Point WWTF Wind Turbine Project was recently bestowed the Water & Wastes Digest's "2012 Top Projects" Award. The nominations included specific water and waste-water related projects in design or



construction within the last 18 months that addressed regulatory demands, cost-efficient technologies, aging infrastructure needs and best practices. PP&R staff was interviewed and a short article was written by their staff to run in the December issue of Water & Wastes Digest. If you would like to read the full article accompanied with a couple pictures, please visit <http://www.wwdmag.com/projects>.

Congratulations NBC!

-- Submitted by Kimberly Kirwan

## PP&R Staff Recognized at Wind Project Ribbon-Cutting Ceremony

On December 3rd, the NBC held the official commissioning ceremony for the NBC Field's Point Wind Turbine Project. This ceremony was well attended by politicians, stakeholders and news crews as Senator Sheldon Whitehouse, Senator Jack Reed, Representative David Cicilline and Mayor Angel Tavares spoke in high regards of the NBC. The NBC Chairman Vincent Mesollesa and Executive Director Ray Marshall then recognized three individuals that put in countless hours of work to bring the NBC Field's Point Wind Turbine Project to completion; Tom Uva, Jim McCaughey & Barry Wenskowicz.



*Top left to right: Jim McCaughey, Tom Uva and Barry Wenskowicz.*

This innovative idea originally came about as a result of an EPA grant awarded to PP&R staff in 2005. With continued persistence, numerous studies were completed, permitting and regulatory hurdles were overcome, weather delays surpassed, and construction of three 365-foot wind turbines accomplished! These three gentlemen were an integral part in bringing the first wind farm into the State of Rhode Island. Congratulations Tom, Jim & Barry for their creative thinking and to all NBC staff for their hard work in making this project a reality!

*-- Submitted by Kimberly Kirwan*

## Holiday Giving at NBC

Each year NBC gives back to the communities during the holiday season to the people in need. Rich Bernier gathered donations for Children's Friend and Service from the third and fourth floor COB employees, who adopted two families, each having four children. The second floor also adopted a family from CFS. CFS has been serving Rhode Island's most vulnerable children and their families since 1834. Many local children face a variety of obstacles in their lives, including poverty, language barriers, lack of education, substance abuse, and difficulty accessing health care. Because of these obstacles, many of their parents have difficulty caring for them. CFS supports families and help them find the strength to overcome their hurdles.

Employees on the first floor made a generous donation to the Rhode Island Community Food Bank this year. The Rhode Island Community Food Bank provides food to people in need and promotes long-term solutions to the problem of hunger. Since 1982, the Rhode Island Community Food Bank has solicited, stored and distributed surplus food and grocery products to qualified member agency programs that serve Rhode Island's hungry. Millions of pounds of donated food and nonfood household products are distributed to the community through their network of more than 250 member agency food programs across Rhode Island.

## Winter Fire Prevention Tips

Now that winter has arrived, the amount of time people spend indoors drastically increases when compared to the other seasons of the year. This is one of the reasons why employees are encouraged to remember the following fire prevention tips that can not only be applied in their work areas, but also within their homes:



**Electrical & Appliance Safety** - Use electrical extension cords wisely, never overload extension cords or wall sockets, immediately discard frayed extension cords and keep an eye on what you cook in toasters and ovens.

**Portable Space Heaters** - Remember to turn off your space heater if you are leaving your work area or if you're leaving for the day. Never run or store space heaters next to combustible materials such as paper or wood. Check to make sure the portable heater has a thermostat control mechanism, and will switch off automatically if the heater falls over.

**Emergency Equipment** - Never block sprinklers, firefighting equipment or emergency exits.

For more information on fire prevention methods, employees may visit the National Fire Protection Association's (NFPA) website.

Safety Trainings: Lockout/Tagout Classroom Training (FP employees). All safety training dates for January are currently posted on the BayNet Calendar.

*-- Submitted by David Aucoin*



*Photos of donations made by the Finance, Accounting & Purchasing departments.*

Holiday Giving at NBC continued...



*Top photos: Donations made by NBC's Legal, Constructions and grants, Engineering & executive affairs departments.*

## AIA Rhode Island Merit Award to the Administration Building Project

The American Institute of Architects, Rhode Island Chapter, awarded NBC a Merit Award to the Administration Building Project at Field's Point. The guiding plan for this project was to create a new administration building that would act as a new public "front door" for the treatment plant, and highlight the NBC's dedication to environmental issues and responsible stewardship of the Narragansett Bay. The building houses the Field's Point staff in an environmentally advanced, LEED certified structure that has the added benefits of a dedicated education center and outdoor green spaces. The building was designed by Providence-based Kite Architects, with construction management by NBC's Construction Department.

Congratulations to all!








# NBC Pipeline

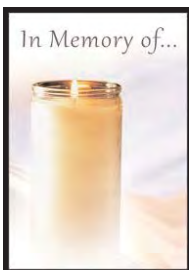
February 2013

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 Payday	2 
3	4	5	6 Last day to purchase discounted Monster Jam tickets	7 8:30 AM Board of Commissioners Meeting	8	9
10	11	12	13	14  Valentine's Day	15 Payday	16
17	18  President's Day	19	20	21	22	23
24	25	26	27	28		

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



In memory of Al Andrade, stickers have been created that can be attached to hard hats or any other surface. A donation of \$2.00 per sticker is required and all proceeds will be donated in Al's memory to the Hasbro Children's Hospital Child Life Program. The Child Life Program provides patients and their families with a sense of normalcy during hospitalization: providing developmentally appropriate play opportunities, preparing pediatric patients for tests, procedures and surgeries, helping them cope and feel comfortable and providing families with emotional support. NBC generously donated \$500 towards the Child Life Program.

**Please see Joe LaPlante or Sal Caparelli to obtain stickers.**

# News Briefs...

2013 RI Spring Flower & Garden Show  
and Food & Wine Festival



This year marks the 20th Anniversary for the RI Spring Flower & Garden Show. As the cold and dark winter months leave everyone longing for spring, the 20th Anniversary Edition of the RI Spring Flower and Garden show delivers spring and so much more. NBC employees can receive a significant discount on tickets: only \$13 (a \$6 savings off the general admission at the door price of \$19). **The Show runs from February 21 -23 from 10 am to 8 pm and Sunday February 24 from 9 am to 6 pm.** Experience 30 award winning gardens, horticultural lectures and demonstrations by nationally-acclaimed lecturers, an exciting garden marketplace with 200 vendors to choose from, a bookstore stocked with your favorite gardening books and enough children's activities to keep the whole family busy during school vacation week. Guest speakers at this event include Kevin O'Connor from "Ask This Old House," Melinda Myers, Julie Moir Messervy, Kerry Mendez and Karen Daubman.

The Food and Wine Festival will also take place at the Flower Show. Combo tickets are \$30 and may be purchased in advance by Feb. 15. This ticket includes both shows. You may also purchase a ticket at the door for \$20 (in addition to your Flower Show ticket). **The hours for the Food and Wine Festival are Thurs. - Sun. from 1 pm to 6 pm.** Speakers at this event include, Sara Moulton, Frank Terranova, Randy Arnold, Ciril Hiltz, Claire Criscuolo and Nemo Bolin. You must be 21 or older to attend. No code is needed to purchase combo tickets.

### Redemption Instructions:

Go to [www.FlowerShow.com](http://www.FlowerShow.com). Select Buy Tickets. Select the \$17 Advanced Ticket. Input the number of tickets that you would like to purchase. Select Go to Checkout. Enter **FSMEMPDISC** in the coupon code section. Click on apply. Your ticket price will drop down to only \$13, which is a \$6 savings of the \$19 at the door price. Enjoy the discount and the show.

Tickets must be purchased by February 15, 2013!

Welcome!



Steven DiRuzzo  
Operator I BP



Shaylyn McCauley  
Administration Assistant

Congratulations!



Paul Nordstrom, Peter Trombetti and Tom Ciolfi received awards at the New England Water Environment Association Annual Conference in Boston on January 30th. Paul Nordstrom was awarded the E. Sherman Chase Award, Peter Trombetti the Alfred E. Peloquin Award and Tom Ciolfi the Operator Award for Rhode Island. Each of these awards are for excellent service in the operation and maintenance of wastewater treatment facilities. Congratulations to all three men!

-- Submitted by Carmine Goneconte

## NBC wins National Environmental Achievement Award



Congratulations to the PP&R team who worked on NBC's SNAPSHOT of the Bay website! NACWA awarded NBC the National Environmental Achievement Award for excellence in e-media.

## Improvements at Bucklin Point Before



## After



Above are before and after pictures of the new drainage basin at Bucklin Point. As you can see before the upgrade the basin had become overgrown. Basins play a significant role during high tides and/or wet weather events. During normal conditions basins retain drainage from the plant and discharge into the river as the tide goes out. When extreme wet weather is approaching the facility and the tide level becomes higher than normal the discharge gates are closed to the pond to prevent any flooding issues.

## Bucklin Point Upgrades



*New Gravity Thickener at Bucklin Point.*

The Gravity Thickener to the left is part of the current upgrade at Bucklin Point, it replaces the current Dissolved Air Floatation system. “This is part of the current upgrade. As much as it has been somewhat trying with all the construction, it is very exciting to witness the transformation of our plant to a state of the art facility. We are anxious and pleased to be part of this,” noted Thomas Ciolfi.

The present Dissolved Air Floatation system was installed in 1984 and was designed to thicken waste sludge by mixing air and liquid polymer. During this process wasted sludge turns into a solid state and floats to the surface. The wasted sludge is then removed and transferred into an outside well and once the well reaches a certain set point the sludge is pumped to the anaerobic digesters.

The new upgrade will mix wasted sludge and liquid polymer and then disperse the mixture onto a filter belt which allows liquid to pass through while retaining solids that are being separated. This will result in a higher percentage of solids that will be pumped to digesters. The new unit will also allow operators to make adjustments that will ensure a proper consistency of the thickened sludge with a decrease in polymer consumption.

## Superbowl Crockpot Queso Dip

### Ingredients:

- 1lb package of Velveeta Cheese loaf
- 2 (8 oz.) cans of diced tomatoes with chilis
- 1 lb of ground turkey
- Tortilla chips

1. Take your Velveeta cheese, and cut it up into cubes. Place in crock pot
2. Drain cans of tomatoes and add to cheese
3. Brown 1 lb of ground turkey. Add to crockpot
4. Turn crockpot on low, stirring every 5-10 minutes until well melted and blended.
5. Keep on low to keep it warm!



## The 2013 Calendar For NBC's Annual Poster Contest Has Arrived!

NBC is pleased to present its 2013 calendar. The calendar highlights the winners from from the annual poster contest. This year the theme was "Party by the Bay," celebrating three very important anniversary dates here at NBC, including the 40th anniversary of the Federal Clean Water Act of 1972, the 30th anniversary of the Narragansett Bay Commission taking ownership of the Field's Point Wastewater Treatment Facility, and the 20th anniversary of the Narragansett Bay Commission taking ownership of the Bucklin Point Wastewater Treatment Facility.

If you would like a copy, Please contact Talia Girard. We hope you enjoy the beautiful artwork created by these talented students.



The month of January is illustrated by Reese Hillier of Marieville Elementary School.

## Spotlight On Stormwater

The winter season is upon us and wintertime in New England often means snow. This provides lots of fun outdoor activities, including skiing, skating, sledding, and building snowmen, however it also means there may be piles of snow to shovel and layers of ice to remove from our driveways and sidewalks. To make this job easier, people often use various products that promise to melt snow and ice. Salt and sand are the most common forms of deicers as they tend to be the cheapest and most effective. However, they do not come without their share of environmental impacts.

Snow and ice melt is considered stormwater runoff and can transport salt, sand, and chemicals used for deicing along with other pollutants into the groundwater or local waterways.

Depending on the product used, stormwater runoff impacts can reduce oxygen levels, introduce toxic chemicals, and increase sediment into local waterways and aquatic habitats. These impacts can also pollute groundwater and drinking water supplies, destroy vegetation along walkways and roads, and deteriorate paved services or clogg storm drains, which can potentially lead to flooding.



To keep the roads and sidewalks safe for travel AND reduce the impact of sand and salt on the environment, consider doing your part by:

- Shoveling early and often! Deicers (salt) work best on very thin layers of snow and ice.
- Use less salt than you think is necessary - a little goes a long way!
- Reduce your use of sand - it merely provides traction and does not melt snow and ice.
- Try an environmentally sound alternative deicing product - they may be a little more expensive but they will have fewer impacts on the environment.

With a few tweaks to your winter routine, it is possible to have fun in the snow and still maintain stormwater runoff quality and sustain safe conditions for foot and vehicle traffic!

-- submitted by Kim Kirwan



# NBC Pipeline

March 2013

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 March*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
					Payday	
3	4	5	6 RIBC Blood Drive 9 AM - 12 PM COB 5:00 PM CAC Meeting	7	8	9
10 Daylight Saving Time Begins	11	12 11:00 AM Board of Commissioners Meeting	13	14	15 Payday	16
17 	18	19  St. Joseph's Day	20 First Day of Spring	21	22 Payday	23
24	25 Passover Begins	26	27	28	29 Good Friday Payday	30
31  Easter						

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



# News Briefs...

## Remembering the Blizzard of 1978



There is nothing in New England that brings the community together quite like bad weather. Last month marked the 35th anniversary of the Blizzard of 1978, right around the time of winter storm Nemo, which deposited up to three feet of snow throughout the northeast. While many people can offer experiences with both storms, Peter Trombetti, Field's Point Operations and Maintenance Supervisor, is the only person lucky enough to be able to experience both at Field's Point! The 1978 storm was a catastrophic Nor'easter that blew through New England with hurricane force winds and dumping over two feet of snow in the Providence area. The Field's Point facility at the time was run by the City of Providence, which had deferred much needed maintenance on the plant. The facility was in very bad condition and considered by the USEPA to be one of the worst municipal polluters in New England.

The storm approached on Monday February 5, 1978 and snowed heavily up until that following Tuesday evening. New Englanders were unprepared and many became stranded on roads and highways or at work, unable to get home. Peter Trombetti had no way of getting to work at the start of the storm. He checked in with the few employees that were on duty at the time making sure everything was alright. The state was at a standstill. Peter decided on that Wednesday once the snow had stopped that he was going to relieve the men that had been stranded there with no food, showers or change of clothes. He walked an hour and a half from his home off Chalkstone Avenue in Providence to the plant.

The facility at the time had no company vehicles, no snow blowers and no ice melt. "We basically had to hang tight and shovel our way out to wherever we needed to go," Peter recalled. "The buildings had no heat, which caused some pipes to burst, but our major concern was to supervise the plant and add chlorine to the wastewater."

Today Field's Point is equipped with amenities the staff could only dream of thirty-five years ago; in 1978 the guys lived out of what was left in the vending machine until that Thursday when the American Red Cross was able to make it down there with a warm meal for the crew. Peter, however managed to score a pizza from a place that was open off of Allens Avenue. "The employees weren't

able to make it home and they had just enough dough for one pizza," he recalled. The United States National Guard was called in to help clear the roads which enabled Peter to make it home that Friday afternoon.

That historic storm will never be forgotten and every winter brings references to the Blizzard of '78 in one way or another; it is the reason why people panic when they hear the word "snow" and run to the grocery stores for bread and milk.

Peter was much more prepared for the recent storm knowing he would be on site at Field's Point; he made sure he had his queen size air mattress, sleeping bag, clothes and plenty of food. The Field's Point staff went above and beyond to make sure everything ran smoothly even with the conditions they encountered (see story on page 3). "In my 40 years of working here, never have I seen such teamwork like I did over this past storm," Peter noted. "We've got a good group here."

## Congratulations!

To David Carvalho on the birth of his first grandchild, **Landon Carvalho**. Born on February 12th to Brad & Marcie Carvalho.




# blood drive!

NARRAGANSETT BAY COMMISSION  
WEDNESDAY, MARCH 6, 2013  
9:00 AM - 12:00 PM  
Main Conference Room  
One Service Road, Providence

**Don't forget to bring your driver's license or another form of identification when you donate.**

Visit [www.ribc.org](http://www.ribc.org) to make an appointment, Sponsor Code 0665.

The Rhode Island Blood Center distributes blood products to hospitals in Rhode Island and Southern New England.



[www.ribc.org](http://www.ribc.org) 800-283-8385

## NBC Cleans Up After Nemo

IM and Field's Point staff joined forces to make sure NBC ran smoothly through winter storm Nemo, also known as the Blizzard of 2013. During the storm they focused on the critical areas of the FPWWTF and the Lab that required round-the-clock sampling and entry/exit points for critical personnel. At the peak of the storm around 8 PM Friday night the facility and the ESPS/TPS went into alarm conditions due to a power outage and the emergency generators kicked in. Unfortunately just a few hours later the ESPS generator failed due to an oil leak in the generator motor, causing the generator to stop. Without power and without the backup generator the plant was unable to pump sewage through the tunnel to the plant, which is crucial.

Mechanics Mark Healy, John Schupp and electrician Sal Giaquinta rushed to the scene where they found it was a broken oil connection. It was then back to the plant to get a portable generator and some lights so they could see what they were doing. Operators Steve Morelli, Jr., Rob Norton and Jim Proulx were able to clean the two inches of oil on the floor while the mechanics made it back with the right parts they needed for the job. Once the part was fixed they then needed to get a 55 gallon drum of oil to fill the generator motor and because there was no power to get the oil to the generator they had to put the oil in 5 gallon containers and pass them along to each other creating a "fire bucket brigade". The generator was back in service by 11:40 PM Friday night; thanks to their quick and decisive action no raw sewage was discharged from the sewer system during that time span. The focus now was getting the power back to the return pump station while the operators continued to shovel and move snow.

All of this occurred during the height of the blizzard. The IM and FP staff did a great job handling the situations and went above and beyond the call of duty during the blizzard. IM had five employees (Paul Annicelli, Mike Bruce, Bob Dutra, Pete Jarest, Dave Teixeira and Dave Weisman) work from 7 AM Friday morning through the night and into Saturday. Then on Monday morning IM had five employees (Paul Annicelli, Mike Bruce, Dave Teixeira, Mike Giammarco and Dan Barlow) come in at 5 AM to sand/salt and prepare the lots for the work day.

In addition several Field's Point Staff members also were a huge part in efforts to make sure the plant ran smoothly: Supervisor Peter Trombetti, Michael Salvatore, Michael Spring; Maintenance Staff members Paul Berger, Mark Brasil, Glenn Peterson and Michael Wolfe; Operations Staff members Eric Bogosian, George Dolan, Ed Feruolo, Broc Hector, Al Montijo, Anthony Turchetta, Joe Celona and Rick Mello.

Huge thanks are in order to all these men on behalf of the staff of the NBC and everyone who benefits from a clean and healthy bay.

## Photos From Winter Storm Nemo



*IM staff from left to right: Paul Annicelli, Bob Dutra, Mike Giammarco, Mike Bruce, Dave Weisman & Pete Jarest.*



*FP Staff from left to right: Steve Morelli Jr., Michael Salvatore, Michael Wolfe, John Schupp, Peter Trombetti, Glenn Peterson, Mark Brasil & Mike Spring.*



*FP Staff from left to right: Mark Healy, Ed Feruolo & Eric Bogosian.*

Photos From Winter Storm Nemo Continued...



*FP staff from left to right: Jim Proulx, Rob Norton & Paul Berger.*



*From left to right: Joe Celona, Anthony Turchetta, Richard Mello, Sal Giaquinta & Broc Hector.*



*FP Operator Eric Bogosian moving snow.*



*FP Staff from left to right: Peter Trombetti & Al Montijo.*



## NEWEA 2013

In January, PP&R staff made great waves reporting on Narragansett Bay Commission initiatives at the 2013 New England Water Environment Associations annual conference. Pamela Reitsma, Cathy Oliver and Christine Comeau opened the conference with a presentation on NBC's results over the past five years of its nutrient monitoring in the upper bay. Steve Lallo and John Zuba followed with a presentation on NBC's storm water mitigation program. Accompanied by representatives from Cuputo, Wick Ltd. and Providence College, John and Steve explained the extensive storm water mitigation installations on the PC campus. Lastly, Dave Aucoin presented on the RIWARN program which followed a panel discussion where Dave addressed disaster preparedness and response. On day two Dave presented "Successful Development & Implementation of a Lockout/Tag-out Energy Control Program." On the last day of the conference, Barry Wenskowicz explained the intricacies of NBC's sustainable energy management program focusing on renewable and energy efficient goals that are making NBC an energy leader. The PP&R team's presentations were well received by the NEWEA community and they were proud to represent the NBC!

-- Submitted by Pam Reitsma



Steve Lallo & John Zuba with representatives from Cuputo, Wick and Providence College.



From left to right: Cathy Oliver, Christine Comeau and Pamela Reitsma.

## March is Workplace Eye Wellness Month



In its ongoing effort to increase personal safety within the workplace and at home, the National Safety Council has designated the month of March as "Workplace Eye Wellness Month." Sponsored by Prevent Blindness America (PBA), the nation's leading volunteer eye health and safety organization, the observation aims to inform and remind employees about common eye problems in adults and children, methods to protect eye sight and prevent eye injuries, and also answers to common eye-related myths. Valuable information on vision screening and programs is also available through PBA's website, in addition to information on eye reports, research and related studies.

It is estimated that of the thousands of eye injuries that occur each day at home and in the workplace, 90 percent of these are preventable with the use of appropriate safety eyewear. Applicable NBC employees are encouraged to always utilize protective eyewear while working around hazardous chemicals, using hand-held power tools, working in adverse outdoor weather conditions, or wherever else the need should arise. NBC provides appropriate protective eyewear to all applicable employees in accordance with OSHA's Personal Protective Equipment standard.

March EH&S Trainings (obtain supervisor's permission and please register through BayNet)

Lockout/Tagout Classroom Training - BP

Confined Space Classroom Training - FP

-- Submitted by Dave Aucoin





# NBC Pipeline

April 2013

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  April Fool's Day	2 Board of Commissioner's meeting 11:00 AM COB	3	4	5	6
7	8	9	10 CAC meeting 5:00 PM	11	12 Payday	13
14	15	16	17	18	19	20
21	22  Earth Day	23	24	25	26 Payday	27
28	29	30				

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

# News Briefs...

## Earth Day 2013: The Face of Climate Change

More than a billion people across the globe take part in Earth Day on April 22nd to protect the planet we call home. This year marks the 43rd anniversary of Earth Day. The theme for this year is "The Face of Climate Change" where the Earth Day Network will tell the world the stories of people, animals and places affected by the climate and those taking action about it.



Climate change has many faces and these faces are multiplying every day. There are those who face the struggle of having to move because sea levels are rising, farmers struggling because of drought, and fisherman whose nets have become sparse. There are those who've lost their homes or business in recent major storms, and there are many who struggle to find clean water. Animals also feel the effects; polar bears are experiencing the melting Arctic, tigers in India are threatened in the mangrove forests, whales find less plankton to feed on in warmer oceans and orangutans have been affected by bushfires in Indonesian forests. These are only a few examples of what's going on in the world today and its effects on people, animals, ecosystems and natural resources.

There are many ways to take care of planet Earth. Organizing community action and awareness campaigns, designing clean technology for the future, creating a green economy and those who live sustainably are all a major help to the planet. Here at The Narragansett Bay Commission we've made contributions to this by keeping the Bay clean, using wind power, recycling, and incorporating green infrastructure such as the features of green roof, rain garden, reused asphalt and concrete rubble, and native plant communities at the new Field's Point administration building.

On April 22nd communities everywhere will voice their concerns and take action to protect planet Earth. The Earth Day Network will collect and display images of people, places and animals affected or threatened by climate change and also those stepping up to do something about it. On Earth Day a digital display will be created and shown at thousands of events around the world and will also be available online to view. The Earth Day Network hopes this will inspire our leaders to act on this subject and inspire individuals to fight against climate change.

NBC is enhancing Earth Day activities in our community by sponsoring Earth Day River Clean-ups in the NBC service area. This year, the NBC decided to sponsor an Earth Day Grant Program to assist local organizations in their Earth Day event efforts with the intention of reaching more rivers and water bodies. Local organizations conducting Earth Day cleanups around water bodies within the NBC district were enticed to apply to the NBC in order to receive grant awards up to \$1,000 for their 2013 Earth Day Event. For the Grant Program's first year, twenty-three applications were received and 19 different Earth Day projects were chosen to receive funding. Happy Earth Day!

## Cream Cheese Sugar Cookies

### Ingredients:

1 cup white sugar  
1 cup butter, softened  
1 (3 ounce) package cream cheese, softened  
1/2 teaspoon salt  
1/2 teaspoon almond extract  
1/2 teaspoon vanilla extract  
1 egg yolk  
2 1/4 cups all-purpose flour



### Directions:

In a large bowl, combine the sugar, butter, cream cheese, salt, almond and vanilla extracts, and egg yolk. Beat until smooth. Stir in flour until well blended. Chill the dough for 8 hours, or overnight.

Preheat oven to 375 degrees F

On a lightly floured surface, roll out the dough 1/3 at a time to 1/8 inch thickness, refrigerating remaining dough until ready to use. Cut into desired shapes with lightly floured cookie cutters. Place 1 inch apart on ungreased cookie sheets. Leave cookies plain for frosting, or brush with slightly beaten egg white and sprinkle with candy sprinkles or colored sugar.

Bake for 7 to 10 minutes in the preheated oven, or until light and golden brown. Cool cookies completely before frosting.

## The Greene School Visits NBC

Nora-Jean Lough and Walter Palm met with the Greene School's biology and chemistry classes on February 28th and March 5th. Nora and Walter gave students a presentation and an idea of what kind of chemistry and biology NBC uses on a daily basis. Students were able to get an inside look at micro-organisms found in wastewater under a microscope.



## The Greene School Visits NBC Continued...



### NBC Physical Team Challenge

The Narragansett Bay Commission Spring Physical Activity Challenge is an exciting voluntary six-week physical activity program available to all employees who have completed training on the Wellness Center exercise equipment. Employees who participate will be eligible for prizes.

#### Here's how it works:

Employees will form teams to compete for the highest number of minutes spent exercising at the NBC wellness centers over a six-week period. There will be four employees on each team.

Each team will select a team captain and come up with a team name.

The program is divided into two, three-week sessions. Participants will keep track of their daily minutes and record their activity on activity logs. At the end of the first three weeks, team captains will collect exercise minute totals from their team members and submit their total exercise minutes to HR.

HR will determine average minutes achieved among all teams and share the results with participants to fuel the competition. At the end of the next three weeks, team captains will again collect the exercise totals from team members and submit the total minutes to HR who will average all scores.

**Best of luck to all those participating!**

### Congratulations NBC

Congratulations to NBC's finance department for another excellent rating with Standard & Poors, receiving a AA- credit rating.



### National Work Zone Awareness Week

The Federal Highway Administration (FHWA) has designated the week of April 15th - 19th as "National Work Zone Awareness Week". Co-sponsored by the American Association of State Highway and Transportation Officials (AASHTO) and the American Traffic Safety Services Association (ATSSA), the annual campaign is designed to heighten motorist and worker safety within work zones throughout the country. The highlighted themes for this year's awareness campaign include the complexities of work zones, in addition to the need for heightened awareness on the part of all parties affected by work zones. This includes planners, road workers, utility workers, pedestrians, drivers, bicyclists, emergency response and law enforcement personnel. There were more than 87,000 crashes in work zones in 2010, accounting for about 2% of all roadway crashes in the United States.



Several NBC employees are required to setup safe work zones as part of their routine job functions. Some of these applicable employees recently completed a required Flagger/Work Zone Safety Refresher Training offered at NBC on March 13th. This training is required every two years and is instructed in accordance with 23 CFR 655.603 - US DOT Manual on Uniform Traffic Control Devices (MUTCD). NBC employees are strictly prohibited from performing flagger duties unless certified to do so by completing this training class.

**Safety Trainings for April:** Permit-required Confined Space Classroom (PT, EMDA, IM & Customer Service): **4/9, 4/16, 4/18, & 4/25**

*-- Submitted by Dave Aucoin*




# NBC Pipeline

May 2013

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	7	8	9	10	11
12	13	14	15	16	17 Payday	18
 Mother's Day						
19	20	21 Board of Commissioner's meeting 11:00 AM	22	23 Goodwill E- recycling event 7:30 AM - 10:00 AM	24 Payday	25
26	27  Memorial Day	28	29 Retirement Readiness 10:30 AM - 1:00 PM	30	31	

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

### Retirement Readiness...



A retirement readiness workshop for adults ages 55+ will be held on May 29th from 10:30 AM - 1:00 PM to help you prepare for your retirement and acquire a better understanding of your individual financial situation. Marc Beausoleil, Retirement and Investment Planning Manager from GPS Investment Advisors, will be giving the presentation and will also be available on the day of the workshop or in the very near future for individual consultations.

To sign up to attend, please call **Kristen at ext. 371**; or **Crystine at ext. 376**. Also, please inform your supervisor if you plan to attend to ensure coverage in your area.



# News Briefs...

## NBC Earns Most Efficient Large Secondary Treatment Plant Award

NBC's Fields Point Wastewater Treatment Facility has received the Most Efficient Large Secondary Treatment Plant award for 2012 from the Narragansett Water Pollution Control Association (NWPCA). Field's Point is receiving this award for having no permit violations for the year 2012.

The award is based solely on permit compliance. The criteria include the number of permit violations for total suspended solids (TSS), biochemical oxygen demand (BOD) and fecal coliform experienced, as well as the yearly average TSS and BOD values added together.

The City of East Providence had one fecal coliform violation. The City of Newport had four fecal violations. Those are the plants in the "Large Secondary Treatment" category. Field's Point has received this award for the past four years and five times in the past six years. The award will be presented at NWPCA's Annual Awards Banquet at the Cranston Country Club on Thursday May 16th.



## Watershed Counts 2013

NBC's PP&R science team has been an active participant in Watershed Counts, a multi-agency initiative created to assess and track the condition of the environment within the Narragansett Bay watershed. For the past three years Watershed Counts has presented a yearly review at the Statehouse to inform the legislature, as well as the public, of the progress made on nine



indicators of environmental wellness. The indicators include: impervious cover, beach closures, freshwater resources, invasive species, freshwater quality, marine water quality, climate change, resource economics and open space.

On April 23rd Tom Uva, PP&R Director presented the yearly Watershed Counts update on the marine water quality. Tom reported that nitrogen discharges from wastewater treatment plants to Narragansett Bay have been significantly reduced and that the state imposed 50% nitrogen reduction goal established for WWTF's will be realized in the near future. In fact, based upon 2012 data, the NBC has already reduced nitrogen discharges by 59% compared to 2003, the year of the massive fish kill in Greenwich Bay.

Speakers from many environmental agencies presented the progress of five other indicators including land use, freshwater quality, freshwater quantity, beach closures and climate change. Governor Chafee, State Senator Walaska and DEM Director Janet Coit were in attendance at the presentation. The NBC also set up an informational booth run by Kim Kirwan and Christine Comeau, who provided fact sheets about NBC to interested legislators and the public. For more specific information and the annual Watershed Counts report, please visit [www.watershedcounts.org](http://www.watershedcounts.org)

## Welcome!



Sonia Martinez,  
Customer  
Service  
Representative



Cassie Balzano,  
Customer  
Service  
Representative

## Congratulations...

To **Junel (Decena)** and David Grande on their marriage. Junel and David wed on Friday April 26th at Belle Mer in Newport.

To **Anthony Turchetta**, Operator I at Fields Point for winning the Assistant Coach of the Year award for 2012-2013 from the Rhode Island Wrestling Coaches Association at their annual banquet in April. Anthony is the Assistant Wrestling Coach at Lincoln Senior High School. Congratulations Coach!

To Jamie and Domenic Grieco on the birth of their baby girl, **Layla Grayce Grieco**. Born on April 12th weighing 7lbs 4oz.



Goodwill E-  
Recycling  
Event  
Thursday,  
May 23rd  
7:30 AM - 10:00 AM



## Call for volunteers: Casual Day Charitable Giving Committee

If you contribute to NBC's Casual Day Fund and would like to help determine which charities should benefit from the donations, please consider volunteering for the Casual Day Charitable Giving Committee.

- Provide input on disbursement of NBC Casual Day donations to appropriate 501 (c)(3) organizations.
- Must have supervisor's approval for participation.
- Must be a contributor to the fund.

**Contact Jamie Samons by May 10 to volunteer.**

## URI Girls Science Camp visits NBC

On April 16th thirty-six 6th through 8th grade girls from a URI girls science camp program came to visit NBC. Cynthia Morissette and Talia Girard gave the girls a tour of the Field's Point Treatment Facility and then worked on a water testing activity with them. The girls tested effluent from the treatment facility for dissolved oxygen, nitrate, phosphate, pH and turbidity.



## NBC's Activity Challenge

The first three weeks of NBC's activity challenge came to an end April 28th and here are the team totals...



**1st Place** - Custom Ops: Rick Mello, Joyce Ranger, Joe Caranci, Steve Morelli, Jr.

Average Daily Minutes Per Person: 85.96

**2nd Place** - Indomitable Four: Ed Davies, Nora Lough, Amanda Henry, Kim Sandbach

Average Daily Minutes Per Person: 58.51

**3rd Place** - Short Circuit: Al Diez, Manuel Velazquez, John Contrino, Bob Partington

Average Daily Minutes Per Person: 44.76

**4th Place** - 2 Guys/2Girls: Claudette Kalf, Nicole Narducci, Nick Narducci, Mark Brasil

Average Daily Minutes Per Person: 23.21

**5th Place** - A-Team: Leah Foster, Patricia Pinilla, Kara Palmisciano, Jacqueline Giroux

Average Daily Minutes Per Person: 17.62

**6th Place** - Underdogs: Crys Marandola, Carmine Goneconte, Marcelo Taveira, Eugene Sorkin

Average Daily Minutes Per Person: 13.75

**7th Place** - Plan B: Jo-ann Ragosta, John Zuba, Kim Kirwin, Mike Spring

Average Daily Minutes Per Person: 10.48

**8th Place** - Manhole Maniacs: Meg Goulet, David Texeira, Mike Giammarco, Trish Fabrizio

Average Daily Minutes Per Person: 6.01

**9th Place** - Fantastic Four: Eric Bogosian, Ed Ferruolo, Anthony Turchetta, Luis Lubo

Average Daily Minutes Per Person: 0

**Good luck to all team members in your ongoing efforts to keep physically active every day and enjoy the benefits of a healthier body.**

**An NBC logo gym bag and \$25 Whole Foods gift certificate will be awarded to each member of the winning team.**

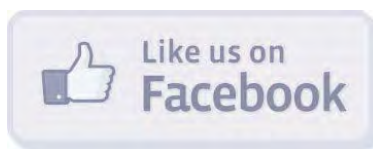
## Woon Watershed Explorers Make Discoveries at Mowry Conservation Area

Woon Watershed Explorers from Anna McCabe Elementary School in Smithfield visited Mowry Conservation Area on April 25th. Students were asked to make observations of their surroundings, find macro invertebrates and determine the quality of the water. Some of the observations they were asked to record were what kind of plants they saw, explain why plants were important to the environment and record the types of living and non living items. They searched for macro invertebrates in the water with fishing nets and found a lot of critters such as water striders, dragonfly nymphs, mayfly nymphs, crayfish, and one vertebrate, a salamander. The crayfish the students found had shed its exoskeleton right in the tray which was exciting for them to see. The students came to

an overall conclusion that the water quality at Mowry Conservation Area is pretty healthy.



Join NBC on Facebook & Twitter for News, Updates, Photos, Events & Much More!



## May is National Electrical Safety Month



Every May, the Electrical Safety Foundation International (ESFI) sponsors National Electrical Safety Month in a continuous effort to promote electrical safety in the home and throughout workplaces and schools. The primary goal of the ESFI during this month-long observation

is to further engage in public education campaigns to prevent electrical fires, injuries and fatalities. Electrocution continues to be a leading cause of workplace fatalities, with an average occurrence of one death per day throughout the country. It is also estimated that more than 30,000 non-fatal on-the-job electrical shocks occur annually, resulting in a significant number of days away from work.

As warmer weather approaches, employees are encouraged to be aware of the electrical hazards that are present in such household and workplace appliances such as air conditioners, aluminum ladders and power strips. Listed below are some useful electrical safety tips:

### NEVER:

- Assume a wire is safe to touch
- Go near or touch overhead wires - stay at least 10' away
- Drive over downed wires
- Use aluminum ladders for electrical work
- Perform electrical work yourself if you're not qualified to do so.

### ALWAYS:

- Shut off power to circuits or devices that you're working on
- Unplug electronics and appliances before severe storms approach
- Avoid wet areas when working on anything electrical

May EH&S Trainings (obtain supervisor's permission and please register through BayNet)

CPR/AED & Basic First Aid Training - 5/21

## NBC Earth Day River Clean-up Grant Program is a Success!

NBC's Earth Day River Clean-up Grant Program was a great success. Nineteen organizations received funding from NBC grants for community organized river clean-ups. NBC's goal was to reach out to more communities, more areas of water and get more people involved to celebrate Earth Day. For more information and pictures of some Earth Day clean-ups click here: [NBC River Clean-up](#)







# NBC Pipeline

June 2013

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
						1
2	3	4	5 NBC Poster Contest/Science Fair Winners 5:00 PM FP edu. room	6	7 Payday	8
9	10	11	12 Blood drive 9:00AM to 12:00 PM COB	13	14 	15
16 	17	18	19 CAC Meeting 5:00 PM	20	21  First day of summer Payday	22
23	24	25 Board of Commissioner's meeting 11:00 AM	26	27	28 Employee steak fry dinner 7:00 PM Fireman's Hall	29
30						

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

# News Briefs...

## NBC & Miss RI Clean up along the shores of Bucklin Point

On Saturday May 18th, NBC staff partnered with volunteers from the Miss Rhode Island Scholarship Program to conduct a river cleanup at NBC's Bucklin Point facility along the banks of the Seekonk River. About 50 volunteers spent the morning planting Spartina cordgrass and picking up trash along the river banks. This cordgrass is important to the Narragansett Bay estuary as it creates habitat for marine life, filters out pollution, stabilizes the banks of the river to prevent erosion and can provide a buffer against flooding. In addition to planting, volunteers collected over 20 bags of debris along with an old TV, several wooden pallets and a couple tires. Thank you to the NBC PP&R and Bucklin Point staff that helped to make this event such a great success!



-- Submitted by Kim Kirwan

## Welcome...



Juan Pablo Andujar,  
IM Operator II

## Congratulations...

To team **Custom Ops** for winning NBC's activity challenge with a grand team total of 17,951 minutes.



Team Custom Ops from left to right: Steve Morelli Jr., Joe Caranci, Joyce Ranger & Rick Mello.

## Field's Point's Blower Building Gets a Makeover!

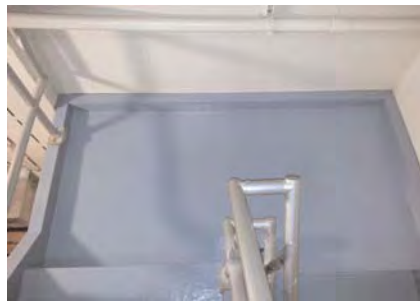
Process Monitor Rob Norton and Operator Jim Proulx took it upon themselves to refurbish and repaint the Blower Building walls, floors and stairs at Field's Point. The building has been in constant 24/7 use since May 26, 1986 and was in need of a makeover!

-- Submitted by Carmine Goneconte

Before



After



To Myles Robert Kalf, youngest son of **Claudette Kalf** and John Kalf of Woonsocket, RI, who received his Associate in Science degree in Video Game Design on May 5, 2013 from the New England Institute of Technology, East Greenwich, RI.

Myles was also recently promoted to Specialist Four in the United States Army Reserve, Fort Devens, Ayer, MA.

## NBC Wins One of the Best Places to Work in RI

The Narragansett Bay Commission has been selected as one of the **2013 Best Places to Work in Rhode Island!** Everyone at NBC should be very proud of this prestigious accomplishment.



## NWPCA Award Banquet

The NWPCA award banquet held on May 16th presented Peter Trombetti with the Alfred E. Peloquin Award and Paul Nordstrom with the E. Sherman Chase Award, both with a proclamation from the Secretary of State Ralph Mollis. NBC's Field's Point Wastewater Treatment Facility also received the Most Efficient Large Secondary Treatment Facility for 2012.

*-- Photos below taken by Michael Spring*



*From left to right: Carmine Goneconte, Raymond Marshall, Peter Trombetti, Paul Nordstrom & Joe LaPlante.*



*From left to right: Douglas Nettleton of NWPCA, Peter Trombetti & Secretary of State Ralph Mollis.*



*From left to right: Douglas Nettleton of NWPCA, Paul Nordstrom & Secretary of State Ralph Mollis.*

## Charitable Giving

After review by NBC's new Casual Day Charitable Giving Committee three charities will receive donations from the fund:

American Red Cross: \$500

Rhett Syndrome Foundation: \$250

Woonasquatucket River Watershed Council: \$250

If you are a contributor to the fund and would like to recommend an appropriate 501(c)(3) organization as a recipient of a Casual Day Donation, email [CasualDay@narrabay.com](mailto:CasualDay@narrabay.com). Please include a brief description of the organization or a link to their website.

## Wild Life at Bucklin Point

Barry Wenskowicz and Brendan Cunha found five ospreys while visiting Bucklin Point.

Ospreys are common sights soaring over shorelines, patrolling waterways, and

standing on their huge stick nests. The Osprey, sometimes known as the sea hawk, fish eagle or fish hawk, are active during the day and prey on fish. They became endangered during the 1950s because of chemical pollutants, which thinned their eggshells and hampered reproduction. Ospreys have rebounded significantly in recent decades, though they remain scarce in some locales. Seeing these birds is a good sign and it looks like they've found a great nesting spot...



## NEIWPC Newsletter Features NBC

NBC was featured in April's Interstate Water Report Newsletter from the New England Interstate Water Pollution Control Commission (NEIWPC). The NEIWPC newsletter discussed the aftermath at many wastewater treatment facilities around the New England area from many of the recent catastrophic storms. NBC was featured in the discussion on Blizzard Nemo and a photo of Peter Trombetti in the height of the storm was featured in the article as well.

NBC faced a major challenge the night the storm began. A backup generator at the Ernest Street pump station had failed and the issue was found to be a broken oil connection. Operators and mechanics worked by flashlight in the pitch black smoke-filled room to fix the broken oil connection. They made several trips back and forth from the pump station to Fields Point to get supplies and it took six mechanics and operators to form an oil bucket brigade, passing five gallon buckets of oil between themselves until the motor was full. This happened at the height of the storm and no raw sewage was released. Bill Patenaude of RI DEM praised their excellent teamwork to restore the generator, "They were incredible, all gung ho," stated Patenaude. This is a perfect example of expect the unexpected.

## Woon Watershed Explorers Celebrate Another Year at Goddard Park

On Friday May 10th over 500 elementary school students, teachers and guests from nine Rhode Island Schools gathered at Goddard Park in Warwick for NBC's annual environmental education conference to conclude NBC's year-long Woon Watershed Explorers environmental education program. The program encourages students and teachers to become stewards of the environment focusing on their local watershed and other surrounding water bodies.

Students from Sarah Dyer Barnes Elementary in Johnston, Anna McCabe Elementary in Smithfield, Kent Heights Elementary in East Providence, Agnes Little Elementary and Nathanael Greene Elementary in Pawtucket, Saylesville Elementary in Lincoln, Reservoir Avenue School in Providence and Centredale Elementary in North Providence, participated in the Woon Watershed Explorers Program this year and attended the conference at Goddard Park.

The students began the day presenting their macro invertebrate projects and NBC staff, Biomes Marine Biology Center, Save the Bay, Audubon Society of RI and Mystic Aquarium set up environmental education activities for the students to participate in the rest of their visit.



## Awards at May's Board of Commissioner's Meeting

At the annual monthly board meeting this month Vincent Mesoellella and Raymond Marshall took the time to recognize many hardworking employees for the awards they have received this year and congratulated them for their outstanding job.



*From left to right: Vincent Mesoellella, Paul Nordstrom with his E. Sherman Chase Award from NWPCA & Raymond Marshall.*



*From left to right: Vincent Mesoellella, Commissioner Angelo Rotella, Peter Trombetti with his Alfred E. Peloquin award & Raymond Marshall.*



*From left to right: Vincent Mesoellella, Cathy Oliver, Joe Roberts, John Motta, Christine Comeau, Kim Kirvan, Jim Kelly, Pam Reistma & Ray Marshall with the Snapshot of the Bay award.*



*From left to right: Vincent Mesoellella, Carmine Goneconte, Peter Trombetti & Raymond Marshall with the award for Most Efficient Large Secondary Treatment Facility.*



*From left to right: Vincent Mesoellella, Brenda Smith, Crystine Marandola, Cecille Antonelli & Raymond Marshall with Unitedhealth Wellness Award.*

## June is National Safety Month

The National Safety Council (NSC) designates each June as "National Safety



Month" in its continuous effort to increase public awareness of preventable injuries and fatalities throughout the country. The NSC estimates that 6 million lives have been saved over the past century due to the direct efforts of the overall safety movement throughout the U.S. Although most of this improvement is undoubtedly related to increased federal regulation, upper management support, process improvements, employee behavior and safe work practices have also contributed to the overall development of safer workplaces during the last 100 years. All NBC employees should be reminded that they are not only responsible for their own safety, but also for the safety of their coworkers, family and friends. When there is a sense of ownership of safety by all employees within a company, this makes each employee a safety leader. In turn, the potential for and frequency of accidents within the workplace and at home begins to decline. NBC employees should be proud to be part of a successful, proactive safety program.

By visiting the NSC's website at [www.nsc.org](http://www.nsc.org), NBC employees can sign-up to receive National Safety Month posters and fact sheets. Each week in June will be associated with a different theme that draws employee attention to the most critical safety issues facing workplaces today.

The weekly themes for the month of June are as follows:

- Week 1: Preventing Slips, Trips and Falls
- Week 2: Employee Wellness
- Week 3: Emergency Preparedness
- Week 4: Ergonomics

June EH&S Trainings will soon be posted on BayNet. As always, please obtain your supervisor's permission prior to registering for any safety training.

-- Submitted by David Aucoin

## Employee Steak Fry Dinner

Friday June 28th @ 7 PM  
Fireman's Hall  
92 Printery Street Providence, RI  
\$20 admission



**RSVP with Eric Bogosian at Field's Point Operations.**

*All additional funds will go to Al Andrade's Fund with Hasbro Children's Hospital Child Life Program.*





# News Briefs...

## Join us in Collecting Much-needed Food for Our Hungry Neighbors

NBC will participate in the Rhode Island Foodbank's Summer Food Drive from **Monday July 15th - Friday July 19th**. Boxes will be set-up at multiple locations; BP, FP, Lab, IM, and COB.

The summertime presents the Rhode Island Community Food Bank with one of its biggest challenges, as it is a time of decreasing donations and increasing need. When school is out, the breakfast and lunch programs that help feed thousands of children during the academic year are not available. Your participation in this year's event would have a major impact in helping those who turn to the services of the Rhode Island Community Food Bank and their network of member agencies.

### Items needed:

- Canned fruits & vegetables
- Canned soups & stews
- Canned dried beans
- Whole Wheat Pasta
- Breakfast cereals
- Peanut butter
- Brown rice
- Tuna

If you have any questions contact **Diane Buerger** at ext. 340.



## Congratulations...

To Christopher Brasil son of **Mark Brasil**, Mechanic I at Field's Point. Christopher proudly graduated from the U.S. Marine Corps Boot Camp on May 25th.



From left to right: Angela Brasil, Christopher Brasil & Mark Brasil.

-- Submitted by Michael Spring

## Poster Contest & Science Fair Award Ceremony

On June 5th NBC hosted an award ceremony for this year's poster contest and science fair winners. Students gathered with friends and family in the education room at the new Field's Point administration building where student's art work were displayed around the room. Jamie Samons presented students with award certificates and a check from the NBC for their excellent work. Those chosen will be featured in the 2014 NBC calendar.



Science Fair winner Katherine Gallison & Executive Director Ray Marshall.



Poster Contest 1st place fifth grade winner Faith Kizekai & Executive Director Ray Marshall.



## Upcoming Flu Shots

Free Flu Shot Clinics will be held on September 19th at Field's Pt., Bucklin Pt. and the COB. Further details will be forthcoming...



## NBC wins Gold & Silver Peak Performance Awards from NACWA

NBC received two Peak Performance Awards from the National Association of Clean Water Agencies (NACWA) for 2012. The Peak Performance Award recognizes member agency facilities for outstanding compliance of their National Pollutant Discharge Elimination System (NPDES) permit limits. The recognition program consists of three categories-Platinum, Gold and Silver.

The Field's Point Wastewater Treatment Facility received the Gold Award for achieving one hundred percent compliance with their NPDES permits for an entire calendar year. Bucklin Point's Wastewater Treatment Facility received the Silver Award which recognizes that they have received no more than five NPDES permit violations per calendar year. Awards were presented to Field's Point and Bucklin Point employees at the June Board Meeting.



*From left to right: Chairman Mesolella, Rich Williams with the Gold Award for Field's Point & Ray Marshall.*



*From left to right: Chairman Mesolella, Ed Taylor, Ed Midgley & Ray Marshall with the Silver award for Bucklin Point.*

## Turtle Found at Central Falls Site

NBC staff found a turtle at Central Falls site Contract 303.02C. This snapping turtle's shell is at least 2' long.



*-- Submitted by Joseph Moniz*

## Goodwill Thanks NBC for its Generous Donation

NBC partnered with Goodwill Industries of Rhode Island for another Green Event on May 23rd. Goodwill would like to thank all those at NBC for their generous donation of **1585 lbs.** of electronics. This will provide Goodwill discretionary funds which will allow them to continue to offer and expand their mission to provide training, education, and other services which result in employment and expanded economic opportunity for people with disabilities and other barriers to employment. 100% of the revenue from these events goes directly towards the training for their clients and job seekers.



## 15 Minute Black Bean and Corn Salsa

*Great for a summer cookout and low in calories!  
Serves about 15 people.*

### Ingredients:

1 can black beans  
1 can yellow corn, or  
yellow and white corn  
1 can of Rotel  
1/4 cup finely chopped  
onion  
about 3 tbsp freshly  
chopped cilantro  
a dash of lime juice (or  
squeeze one lime)

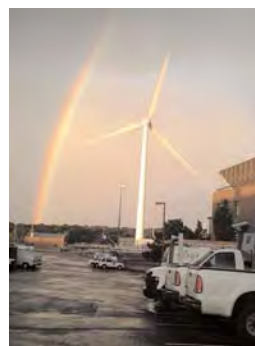


### Directions:

- Open can of black beans, place in strainer and rinse off excess juice then dump in a bowl.
- Open can of corn, place in strainer to drain off excess water, then dump in bowl with beans.
- Open can of rotel and add to beans and corn.
- Add onions and cilantro and stir.
- Add lime juice to your taste.

*-- sparkrecipes.com*

## Rainbow After the Storm



Shift Supervisor John Tatro captured this beautiful photo after the storm on June 17th.

## GFOA Presents NBC with the Distinguished Budget Presentation Award and the Certificate of Achievement for Financial Reporting



NBC has received the Distinguished Budget Presentation Award from the Government Finance Officers Association of the United States and Canada (GFOA) for its annual budget for the fiscal year

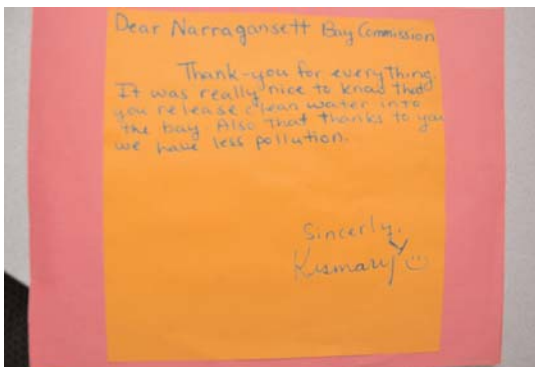
beginning July 1, 2012. The GFOA also awarded NBC the Special Performance Measures Recognition and Special Capital Recognition. NBC has been awarded the GFOA Distinguished Budget Award for the eleventh consecutive year with Special Recognition for Capital for the fourth consecutive year and Special Performance Measures Recognition.

In order to receive the GFOA's Distinguished Budget Award, NBC puts together a budget document that meets program criteria and must be rated either proficient or outstanding by at least two of the three reviewers in all four categories; policy document, financial plan, operations guide, and communications device. In order to obtain Special Capital Recognition NBC must receive outstanding ratings in Capital Expenditures and Debt by all three reviewers. Special Performance Measure Recognition is obtained when three viewers must find the Performance Measures to be outstanding.

The GFOA has also awarded NBC the Certificate of Achievement for Excellence in Financial Reporting for its comprehensive annual financial report (CAFR). The CAFR award is the highest form of recognition in the area of governmental accounting and financial reporting and represents significant accomplishment. NBC has received this award for 11 consecutive years as well.

### Mount Pleasant High School Students Visit Field's Point

Mount Pleasant High School students visited NBC in May for a tour of the Field's Point Wastewater Treatment Facility. Students were very impressed with what NBC does to treat the wastewater and release it safely into the Bay. Students sent many thank you letters expressing their appreciation and how much they learned on their visit.



*From left to right: Chairman Mesolella, Shaylyn McCauley, Jaime Overton, Karen Giebink, Sherri Arnold & Ray Marshall with the Distinguished Budget Presentation Award.*



*From left to right: Chairman Mesolella, Jacqueline Giroux, Patricia Pinilla, Cheryl Pescarino, Leah Foster & Ray Marshall with the Certificate of Achievement for Financial Reporting Award.*

### NBC is Participating in Farm Fresh RI Veggie Boxes

Just a reminder Farm Fresh RI Veggie Boxes will start delivery on July 9th. Deadline to join is July 1st. You may participate late in the program for a prorated rate. Any questions or those who would like to sign up please contact **Cynthia Morissette** at [cmorissette@narrabay.com](mailto:cmorissette@narrabay.com) or ext. 351.





# NBC Pipeline

August 2013

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## Calendar of Events *for August*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
					Payday	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
	 HOLIDAY				Payday	
18	19	20	21	22	23	24
25	26	27	28	29	30	31
					Payday	

# News Briefs...

## NBC wishes John Tatro a Happy Retirement

John Tatro retired from the NBC on July 31, 2013 after 22 years of service. John was hired as a Supervisor on 6/30/1991 after serving as the Superintendent at the Westerly WWTP while working for a private contract operations company. John brought a great deal of operations experience to Field's Point especially in the area of activated sludge process control. He was excellent at teaching new operators the basics of wastewater treatment. He was also a very nice gentleman and will be sorely missed by his shift workers and his fellow Supervisors and Managers.

-- Submitted by Carmine Goneconte



Field's Point Staff celebrating O & M Supervisor John Tatro's last shift of duty on Wednesday 7/10/2013. Front row left to right: Steven Morelli Jr., James Proulx, Rick Mello, John Tatro, Mike Starnino and George Dolan. Back row left to right: Joseph Celona Jr., Ansumana Sirleaf, William Mcborough, Carmine Goneconte, and Ron Turley.



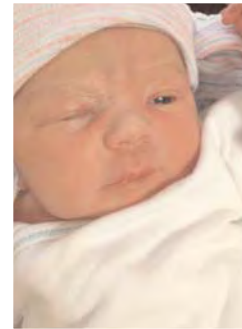
## NBC Receives Platinum Award for Excellence in Management from NACWA

NBC received the Platinum Award for Excellence in Management from the National Association of Clean Water Agencies (NACWA) for



2013. This award recognizes the significant achievements of member agencies in the utility management arena. This award honors NACWA member agencies that have implemented and sustained, successful programs that address the range of management challenges faced by public clean water utilities in today's competitive environment. NBC has received recognition for this award for 3 years and is one of only three publicly owned treatment works in the United States to receive the 2013 Platinum designation. A very extensive application is required to apply for the award. Applicants are limited to publicly owned wastewater treatment agencies, applicants must be a member in good standing with NACWA, and applicants who've received the award previously must wait three years to apply for it again. The Platinum recognition is based on implementation of a total of nine of the Ten Attributes of Efficiency Managed Water Sector Utilities, and implementation of a total of four Resource Efficiency and Protection Activities.

## Congratulations...



To Claudette Kalf on the birth of her granddaughter **Maddison Elizabeth Kalf**, born on May 25th weighing 7 lbs 20 oz.

## EMDA Finds Old Sailing Ship Anchor in Narragansett Bay

On July 17th, EMDA's crew of the R/V Monitor were out on the Upper Bay conducting routine nutrient and plankton sample collections. The R/V Monitor dropped anchor by the Pomham Lighthouse Station on the west side of



the shipping channel. While dropping the anchor the crew realized it had become entangled with something. After struggling to pull up the anchor, up came with it an estimated 17th-18th century old sailing ship anchor. Experts in the marine artifacts field have been contacted for



direction on what to do with this piece of history. The anchor has been returned to the Bay in an undis-

closed location to prevent degradation that would be accelerated with the anchor's exposure to the air until it can be turned over to an institution that can properly preserve it.

## Working Safely During Hot Weather



Whether your job entails continuous, routine or occasional work outdoors during periods of hot weather, it is crucial that all NBC employees remain vigilant while conducting their daily duties in order to avoid overexertion and heat-related illness. Since 2011, OSHA's Heat Illness Prevention Campaign has continued to reach out to employers and employees to ensure that the dangers of working in hot and humid weather are well understood so that proper safety precautions can be taken by all.

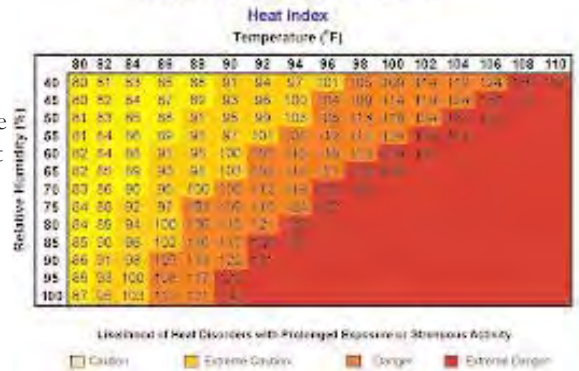
Any employee exposed to hot and humid conditions is at risk of heat illness, especially those conducting heavy work tasks or wearing bulky protective clothing. It is important for all employees to recognize that heat illness can exhibit itself in several different ways - heat rash, heat cramps, heat exhaustion, and heat stroke. Remember that heat stroke requires immediate medical attention and can result in death. A nationwide map of recent heat illness worker fatalities can be viewed [here](#).

All heat-related illnesses and fatalities are preventable. NBC employees are reminded to adhere to the following precautions while working outdoors in hot weather:

- Drink water every 15 minutes, even if you're not thirsty.
- Rest in the shade to cool down.
- Wear a hat and light-colored clothing, if possible.
- Learn the signs of heat illness and what to do in an emergency.
- Keep an eye on fellow workers during your shift.

## How to calculate the "feel-like" temperature

NOAA's National Weather Service



## August EH&S Trainings (obtain supervisor's permission and please register through BayNet)

Flagger/Work Zone Safety Training: 8/22 & 8/27

## Thank You For Participating in the Summer Food Drive

NBC donated **295 lbs** of food to the RI Community Food Bank to those in need. Thank you to all those who donated.



## Screw Pump Rebuild at Bucklin Point

On July 16th and 17th Mechanics from Field's Point and Bucklin Point worked together to repalce a worn lower bearing on a screw lift pump at Bucklin Point. Good team work!



Pictured left to right are: Kevin MacDonald from BP, Glenn Peterson, Mark Brasil and John Schupp from FP, and Tim Henshaw from BP.

## Union Employees Mark Your Calendar

The State of RI and TIAA-CREF will be conducting a Financial Education Seminar.

**Wednesday September 18, 2013 at 11:00 am at Bucklin Point**

**Tuesday, September 24, 2013 at 11:00 am at Field's Point**



Join us at this seminar to learn a few simple steps that can help put you on the right track to planning your future today. Topics will include:

- Determining how much you need to save
- Evaluating factors that impact your retirement
- Bridging a savings gap
- Choosing appropriate investments

-- Submitted by Carmine Goneconte

## NBC's Digger Truck Visits the Children's Museum

NBC's IM Operator II David Weisman and Heavy Equipment Operator Michael Bruce took IM's digger truck to the Children's Museum on July

23rd. David and Michael provided hard hats and safety vests for the kids to try on and wear while exploring the truck. The children were fascinated, they had a great time climbing into the truck to be the horn and feel what its like to be a truck driver.



## Annual Man Overboard Training

On July 10th NBC EMDA staff participated in the annual Man Overboard Training aboard the R/V Monitor. This year, the training was conducted in conjunction with the U.S. Coast Guard



Auxiliary Personnel. Norm Choquette and Jim Collinson joined NBC Staff from the Coast Guard Auxiliary and shared their expertise in boating safety and man overboard recovery. The instruction entailed properly retrieving a manikin thrown overboard while the boat was underway. Proper spotting and position fixing techniques, as well as properly turning and maneuvering the



R/V Monitor were crucial elements of the training exercise. NBC EMDA staff sends thanks to the Coast Guard Auxiliary for sharing their knowledge.





# NBC Pipeline

September 2013

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## Calendar of Events *for September*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2  Labor Day HOLIDAY	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18 Blood Drive COB 9a-12p CAC meeting 5:00 PM	19 Flu Shots FP: 6:30a-8:30a COB: 9:30a-11:30a BP: 2p-3p	20 Payday	21
22  First Day of Autumn	23	24 Board of Commissioner's meeting 11:00 AM	25	26	27 Payday	28
29	30					
<i>All meetings are held at the Commission's One Service Road Offices unless otherwise noted.</i>						

# News Briefs...

Free flu shot clinic at three NBC locations on **Thursday, September 19th.**

Field's Point: 6:30 am - 8:30 am - Education Room

COB: 9:30 am - 11:30 am - Main Conference Room

Bucklin Point: 2:00 pm - 3:00 pm - Training Room

Register online at: [www.thewellcomp.com](http://www.thewellcomp.com)

Click: Register Now

Click: Flu-Worksite Events

Choose the login of the location that is most convenient for you

Login for the COB: narrbayone

Login for Field's Pt: narrbayern

Login for Bucklin Pt: narrbaycamp

You must have your insurance card with you.

Must be 19 years and older.



## Union Employees Mark Your Calendar

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**Wednesday September 18, 2013 at 11:00 am at Bucklin Point**

**Tuesday, September 24, 2013 at 11:00 am at Field's Point**

Join us at this seminar to learn a few simple steps that can help put you on the right track to planning your future today. Topics will include:

- Determining how much you need to save
- Evaluating factors that impact your retirement
- Bridging a savings gap
- Choosing appropriate investments



## Congratulations...

To IM Mechanic Anthony Lena on the birth of his adorable niece, Olivia Elizabeth Slaughter. Born August 8th weighing 9lbs 2oz, and 21" long.



## Act of Kindness

For Sherri Arnold's daughter, Amber Arnold's 10th Birthday, she asked friends & family to bring donations for the shelter animals, rather than gifts! This is the second year in a row that Amber has celebrated her birthday by collecting for the animals at the Exeter Animal Shelter.



# blood drive!

**NARRAGANSETT BAY COMMISSION**  
**WEDNESDAY, SEPTEMBER 18, 2013**  
9:00 AM - 12:00 PM  
Main Conference Room  
One Service Road, Providence

Don't forget to bring your driver's license or another form of identification when you donate.

Visit [www.rhoblood.org](http://www.rhoblood.org) to make an appointment. Sponsor Code 1005

The Rhode Island Blood Center distributes blood products in hospitals in Rhode Island and Southern New England.

**Rhode Island Blood Center**  
[www.rhoblood.org](http://www.rhoblood.org) 800.382.4388

## Waters Worth It

On August 2nd NBC hosted a press conference regarding boosting investment in Rhode Island clean water projects. U.S. Senator Jack Reed joined NBC Chairman Vincent J. Mesolella, NBC Executive Director Ray Marshall, Executive Director of the Rhode Island Clean Water Finance Agency William Sequino Jr., and Executive Director of the Warwick Sewer Authority Janine Burke to introduce plans to provide Rhode Island with \$18.4 million in the fiscal year 2014 to upgrade its water infrastructure. Under U.S. Senator Jack Reed's bill, Rhode Island would receive \$9.53 million through the Clean Water State Revolving Fund and \$8.87 million through the Drinking Water State Revolving Fund.

"Upgrading our water infrastructure is essential to ensuring quality water service for Rhode Islanders," said Senator Reed. Reed is the Chairman of the Appropriations Subcommittee on Interior & Environment and has campaigned actively to fund the Clean Water and Drinking Water State Revolving Funds, which provide loans to communities throughout the country to fund improvements to their wastewater, stormwater, and drinking water facilities.



*From left to right: NBC Chairman Vincent J. Mesolella, U.S. Senator Jack Reed, Executive Director of the RI Clean Water Finance Agency William Sequino Jr., Executive Director of the Warwick Sewer Authority Janine Burke, and Chairman Aaron Guckian of the Warwick Sewer Authority.*



*U.S. Senator Jack Reed with Field's Point Operator I, Luis Lobo.*

States rely on this federal funding. In Rhode Island, the Department of Health and the Department of Environmental Management have identified approximately \$1.5 billion in priority projects. These State Revolving Funds only cover a small portion of what Rhode Island needs to invest in to meet clean water needs, and without these funds repairs and upgrades that are vital will become costlier in the long run.

## Repairs on the Omega Pump Station

NBC would like to recognize the great job IM and BP staff have done over the last couple of weeks to make repairs at the Omega Pump Station, with assistance from the Bucklin Point Electrician, Fred Diez. During this work, they cleaned a large amount of debris from the wet well. This has been very challenging due to the limited access to the wet well and the equipment needed to perform the work. Staff managed to clean out the wet well effectively and remove a very large board that was impeding. Great Job Dave Weisman, Pete Jarest, Tony Lena, Dan Barlow, Fred Diez and Dave Teixeira!



*-- Submitted by Meg Goulet*

## Peach Cobbler & Homemade Whipped Cream

Total time: 1 hr 30 min  
Total serving: 8 people

### Ingredients

Two 15-ounce cans sliced peaches in syrup  
1/2 cup (1 stick) butter  
1 cup self-rising flour  
1 cup sugar  
1 cup milk  
Homemade Whipped Cream, recipe follows



**Cook's Note:** If you don't have self-rising flour, substitute 1 cup all-purpose flour mixed with 1 1/2 teaspoons baking powder and 1/8 teaspoon salt

**Directions:** Preheat the oven to 350 degrees F. Drain 1 can of peaches; reserve the syrup from the other. Place the butter in a 9- by 12-inch ovenproof baking dish. Heat the butter on the stove or in the oven until it's melted. In a medium bowl, mix the flour and sugar. Stir in the milk and the reserved syrup. Pour the batter over the melted butter in the baking dish. Arrange the peaches over the batter. Bake for 1 hour. The cobbler is done when the batter rises around the peaches and the crust is thick and golden brown. Serve warm with fresh whipped cream

### Homemade Whipped Cream:

2 cups whipping cream, chilled in the fridge  
4 tablespoons sugar

**Directions:** Chill a large metal mixing bowl and the wire beater attachment in the freezer for about 20 minutes. Pour the chilled cream and sugar into the cold mixing bowl and beat until it forms soft peaks, about 5 minutes. The mixture should hold its shape when dropped from a spoon. Don't overbeat or you'll have sweetened butter!

-- [foodnetwork.com](http://foodnetwork.com)

## National Preparedness Month



Each year, the month of September is designated as National Preparedness Month by the Federal Emergency Management Agency (FEMA).

Through the channels of its popular "Ready.gov" campaign, FEMA continues to remind us that emergencies can strike suddenly and always have the potential to cause disruption to normal daily routines at home and at work. Emergencies may be local, statewide, natural or man-made, and all NBC employees should be reminded of the following basic steps while preparing for emergencies:

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. In the event that NBC's Adverse Weather Policy is implemented, check with your supervisor for specific instructions.
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. As a reminder, NBC's Hurricane Preparedness Plans are available on SharePoint and can be accessed by clicking here.

September EH&S Trainings (obtain supervisor's permission and please register through Bayonet)

- Audiometric Hearing Tests - 9/10 & 9/11 (applicable employees)

-- Submitted by Dave Aucoin



# NBC Pipeline

October 2013

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	9	10	11	12
13	14	15	16	17	18	19
	 Columbus Day HOLIDAY				 Payday P-Bruins game 7:05 PM	
20	21	22	23	24	25	26
			CAC meeting 5:00 PM		Payday	
27	28	29	30	31		
		Board of Commissioner's meeting 11:00 AM				

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

## NBC Fall Fitness Challenge

Session 1: Ends October 13th.

Session 2: Begins October 14, 2013 through November 3, 2013.

Goal: Walk a minimum of 5,000 steps per day or at least 30 minutes of exercise most days of the week.



Each employee that completes the Fall Fitness Challenge and turns in their logs will receive the \$100.00 wellness reimbursement.

# News Briefs...

## Updates on the Repairs at the Omega Pump Station at Bucklin Point

NBC would like to congratulate IM staff members David Weisman, Pete Jarest, Tony Lena, Dan Barlow, and David Teixeira on a job well done! The Omega Pump Station in East Providence pumps sewage across Omega Pond in East Providence. If any problems impacted the operations of this pump station, it would be very difficult to provide sewage transport around this pond. IM Staff spent many days over the



*Shown from Left to Right are: Dave Weisman, Pete Jarest, Tony Lena and Dan Barlow; not shown is Dave Teixeira.*

last month performing repairs to the wet well as was seen in the September Pipeline, while Septic Haulers provided us the transportation needed to prevent sewage backups. The work involved pumping sewage out of the wet well, entering a very challenging confined space, physically removing heavy grit and debris, and assisting with the installation of an expansion joint in the wet well walls. The crew worked together to manage tasks, equipment, tempers and schedule. In the end, the expansion joint was completely repaired. This allows us to perform various repairs to this facility while still allowing flows to pass through the pump station without having to truck the sewage around the pond.

*-- Submitted by Meg Goulet*

## Casual Day Giving

NBC will donate to the Gloria Gemma Breast Cancer Resource Foundation for the month of October. 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 in Rhode Island.



If you contribute to the Casual Day fund and would like to suggest a 501(c)(3) organization as a donation recipient, please contact one of the members of the Casual Day Charitable Giving Committee: Jacqueline Giroux, Patricia Pinilla, Claudette Kalf, Lori Vernon, Leah Foster, Kim Kirwan, Renee Rinaldi-Patterson or Jamie Samons.

## Mark Your Calendar...

A lunch and learn non-union retirement workshop will be held on **October 17, 2013 from 10:30 am - 1:00 pm.**

Hosted by Marc Beausoleil from GPS Investment Advisors. Marc's presentation will target younger to middle-aged investors.



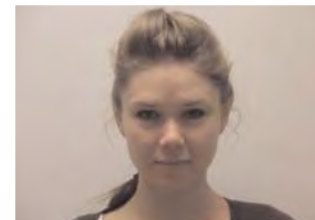
## Welcome...



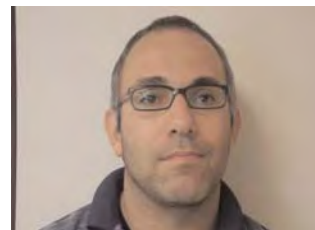
Gail Degnan,  
Financial Analyst



Ricardo  
LaManna, BP  
Operator I



Kerri Houghton,  
Lab Technician



Jeffrey Farias,  
Solutions  
Architect

## Know Your Numbers Event

Attend NBC's annual health screening event on **November 14, 2013** and earn a \$100 wellness incentive.



A variety of screenings, such as blood pressure check, cholesterol and glucose testing, height/weight/body mass index measurements will be available and results will be provided immediately and confidentially on-site.

More details coming soon...

## October is Adopt a Shelter Dog Month

October is recognized as Adopt-a-Shelter-Dog Month by the ASPCA. The ASPCA is urging animal lovers across the country to celebrate the occasion by doing their part to help



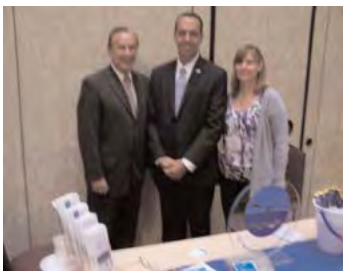
raise awareness for homeless animals. About 12 million dogs go to shelters each year and more than half of those dogs are euthanized because of lack of space, resources and willing adopters.

The ASPCA states that those who adopt tend to be more satisfied in their decision because of the positive experience and because shelter dogs tend to require less veterinary care than those purchased from a pet store. Most pet store puppies come from puppy mills and the ASPCA urges people to adopt a new companion from a shelter so that puppy mills will become unsustainable.

Adopting a dog is a great thing to do but be sure that you do your research ahead of time and that you're truly ready to become a dog owner. Go to a site like [petfinder.com](http://petfinder.com) and look for your local shelter and you should come up with results of dogs that are waiting to be adopted. There will be some information posted by the shelter about the dog's temperament, whether it gets along with kids, other animals, etc. Then do some research on the breed, and schedule a visit to the shelter to see if this dog is the right fit for you and your family.

## We Mean Business

On September 10th, John Zuba and Kerry Britt represented the NBC at the 7th Annual "We Mean Business" Expo, presented by Secretary of State A. Ralph Mollis, Governor Lincoln D. Chafee and the Rhode Island Economic Development Corporation. This event, free to



the public, was held at the Crowne Plaza in Warwick, RI from 10am - 3pm. The main focus of this event is to let Rhode Island small business owners and entrepreneurs know that the local, state and federal agencies that regulate them are there to help them and are committed to making it easier to conduct business in the State of Rhode Island. The NBC participated in this event to provide information on the various programs the NBC has to offer the local business community and the event was well attended.

## Congratulations...

To **Ronald Goodinson** for being the only Amateur Softball Association of America (ASA) umpire from the North East area to be chosen for the National Championship Tournament and also selected as a member of the championship crew. Ronald has been an umpire for over twenty years working baseball, softball, and basketball games throughout Rhode Island and New England. The tournament was held over Labor Day weekend in Kansas City and Liberty, MO in over 100 degree weather.



*Championship crew photo, Ronald Goodinson is the second one in on the right in the front row.*

## Pam Reitsma's Article Gets Published in September's Issue of Environmental Science & Technology Journal

After graduating from the University of Rhode Island Graduate School of Oceanography in 2010 with a Master of Science Degree in



Oceanography, NBC Environmental Scientist **Pam Reitsma** did not simply leave academia behind. Pam has now officially become a published author. Based on her graduate school thesis work, Pam wrote a scientific article entitled "Challenges of Using Polyethylene Passive Samplers to Determine Dissolved Concentrations of Parent and Alkylated PAHs under Cold and Saline Conditions", which was published in the September 2013 issue of the Environmental Science & Technology Journal. Congratulations Pam!

For those that wish to read the full article, it can be found at <http://pubs.acs.org/doi/abs/10.1021/es402528q>



# NBC Pipeline

## November 2013

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### Calendar of Events *for November*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5  Election Day	6	7	8 Payday	9
10	11 Veterans Day  HOLIDAY	12	13	14 Know Your Numbers Event 7 AM - 11 AM COB	15	16
17	18	19	20	21	22	23
24	25	26	27	28  Thanksgiving HOLIDAY	29 Payday	30

### Time Change

Now that Daylight Savings Time has approached and the days are shorter, please remember that if you should be working late and want assistance getting to your vehicle, please contact the FP on-duty supervisor at extension 229. If you get a voice recording, contact the process monitor at extension 224.





# News Briefs...

## NEWEA Awards NBC with 2014 Energy Management Achievement Award

NBC has been awarded the 2014 Energy Management Achievement Award by the New England Water Environment Association (NEWEA). The NEWEA energy committee received two nominations this year and found both to be outstanding. The selection sub-committee chose to recommend the NBC nomination for this year's award and the award committee accepted. The NEWEA Energy Management Achievement Award recognizes the achievement of an organization or facility with a written policy, goal and demonstrated progress toward a downward trend in the amount of energy (electricity, gas, oil or other) used per unit of water treated.



Nominees must meet the following requirements:

- NEWEA membership of organization/facility leadership
- Candidates for nominations will be given preference for reaching or showing progress toward Zero Net Energy status
- Preference shown for demonstrating a track record of experimenting with new technologies
- Candidate should have noticeable and recognizable contributions to the water environment and energy industry, and/or to NEWEA, through sharing their experience with other facilities via tours, presentations, paper, etc...

The Energy Management Achievement Award will be formally presented at the awards luncheon at the annual conference in January.

Congratulations NBC!

## Know Your Numbers Event

Attend NBC's annual health screening event on **November 14, 2013 7 AM - 11AM** and earn a \$100 wellness incentive. A variety of screenings, such as blood pressure check, cholesterol and glucose testing, height/weight/body mass index measurements will be available and results will be provided immediately and confidentially onsite.



To participate in the health screening event, you will need to register for the event online at <https://register.wellness-inc.com>. Please use the registration key Na-95092-3 to access this event.

You will receive an e-mail confirmation in your email inbox after successfully completing the registration process.

**Be sure to register NO LATER than 24 hours prior to the event to secure a time that fits your schedule.**

For more information please contact the HR office.

## Welcome...



Ryan T. Grasso,  
Pretreatment  
Technician



Olga Shirzadi,  
EMDA Clerk



Roberto Navarro,  
BP Operator I

## November Training Classes

NBC is running Two healthy back/preventing slips and falls training classes.

Classes will be on **Tuesday, November 5th from 8:30 am to 10:00 am** and the afternoon class runs from **1:00 pm to 2:30 pm**. Both classes will be held at the FP Administration Building in the Education Room.



Check with your supervisor if you are interested in taking the class before November 5th.

# 5th Annual NBC Pumpkin Carving Contest



Finance



Human Resources



Customer Service



Executive



PP & R



Accounting



Purchasing & Lab

# 5th Annual NBC Pumpkin Carving Contest Continued...



EMDA



IM

## Pickrel Frog Found at Esmond Park

Students from S.D. Barnes Elementary School in Johnston visited Esmond Park Friday, October 11th for part of the year-long Woon Watershed Explorers Program. Students made observations of their surroundings at the park to judge what the water quality may be like before they actually tested the water. Students tested for fecal coliform, dissolved oxygen, pH, nitrate, phosphate and turbidity. While making observations NBC staff and students found a Pickrel Frog in the river.



*Students from S.D. Barnes checking out the Pickrel Frog.*

The Pickrel Frog often confused with a Leopard Frog, is a medium sized gray or tan frog marked with seven to twenty-one irregular rectangular dark brown spots which are oriented in two columns down its back. The frog's spots and coloring help for camouflage. They eat a balanced diet of invertebrates they find in grassy areas next to streams. Their habitats are relatively varied but are very popular in the North East. They are active from April to October and then go into hibernation the rest of the year under the bottom of debris and silt of their aquatic habitats.



*Pickrel Frog from Esmond Park.*

## NBC Health and Safety Program Refresher

NBC's Health & Safety Program continues to provide NBC employees with the knowledge necessary to remain safe throughout the course of their daily job activities, while being afforded the right to work within an environment that is free from recognized hazards. This is continuously accomplished by offering applicable OSHA-related trainings to NBC employees on an annual basis, based on their level of risk to specific types of hazards within the wastewater treatment environment. In other words, all NBC Health & Safety trainings are conducted based on a categorical risk assessment directly related to each employee's job description and current duties.

For example, all NBC employees are required to receive OSHA Emergency Action Plans training, whereas a NBC Operator or Mechanic is required to receive advanced safety training on such OSHA standards as Permit-required Confined Space, Lockout/Tagout and Hazard Communication. Employees in other sections may be exposed to different degrees of hazards and therefore receive additional training in such areas as Work Zone Safety, Chemical Industrial Hygiene, and Hazardous Waste Operations & Emergency Response (HAZWOPER).

NBC managers are responsible for ensuring that their employees attend all applicable safety training classes offered by NBC. If anybody is unsure of the safety training requirements that pertain to the employees within their particular section, please contact NBC's Safety Compliance Coordinator at ext. 418 for information.





# NBC Pipeline

December 2013

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## Calendar of Events *for December*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
1	2	3	4	5  Hanukkah Ends	6 Payday	7	
8	9 New Service Desk Training 10:30 AM & 1:30 PM	10 Board of Commissioners Meeting 11 AM FP Employee Appreciation	11 BP Employee Appreciation	12 COB Employee Appreciation IM Employee Appreciation	13	14	
15	16	17	18	19	20 Payday	21  Winter Begins	
22	23	24  Christmas Eve	25 Christmas Day HOLIDAY	26  Kwanzaa Begins	27	28	
29	30	31  New Year's Eve	<i>See page 3 for Employee Appreciation Event Times.</i>				
<i>All meetings are held at the Commission's One Service Road Offices unless otherwise noted.</i>							

### Upgrades to NBC's Help desk

IT is upgrading NBC's Help Desk System. Beginning on January 1, 2014 requests for IT assistance will be handled by a program called Service Desk. The Service Desk program will work with IT's Asset Core system to better track and troubleshoot technology issues for users. An IT demo for management will be held in the main conference room in the COB on December 9th at 10:30 AM and 1:30 PM. The demo should take no longer than 15 minutes and is for managers who could not make the demo on November 27th. No sign-up or registration is necessary.



# News Briefs...

## Executive Director Ray Marshall to serve on the Narragansett Bay Estuary Program Management Committee

NBC's Executive Director Raymond Marshall has been chosen to serve as the Rhode Island wastewater industry representative on the Narragansett Bay Estuary Program (NBEP) Management Committee. The NBEP Management Committee consists of top-level decision makers in Rhode Island and Massachusetts including environmental organizations, academic institutions, watershed groups, and key state and federal agencies.

The NBEP's mission is to protect and preserve Narragansett Bay and its watersheds in both Rhode Island and Massachusetts, through partnerships that conserve and restore natural resources, enhance water quality, and promote community involvement. The NBEP operates under the National Estuary Program which was established by The Federal Clean Water Act and is one of twenty-eight nationally designated programs to protect and restore the country's precious resources.

The NBEP and its partners work toward this mission through the development and operations of the Comprehensive Conservation and Management Plan for the Narragansett Bay. Through consensus, the committee guides and establishes program priorities, and approves annual work plans that identify projects and funding for the coming year. The Management committee shares collective resources and take a collaborative and coordinated approach to address critical issues affecting the estuary and its watershed.



## Welcome...



Brandi-Lyn Colacone,  
Environmental Monitor



Ryan Sullivan,  
Chemist

## Congratulations...

To **Tom Uva** on his reappointment to the Environmental Monitoring Collaborative of the Rhode Island Bays, Rivers and Watersheds Coordination Team by Governor Lincoln D. Chafee.

To **NBC** for another AA- rating from standard & Poors!

**STANDARD  
& POOR'S**

## NBC Snapshot Website is Getting Attention Around the World

Snapshot of the Bay received an e-mail all the way from Cyprus in regards to our phytoplankton blog. Rana, a graduate student at the University of Cyprus and a research assistant at The Cyprus Institute's Marine Laboratory congratulated NBC on the articles and posts we have on Snapshot.

NBC's PP&R team has done a great job with the site and it has been a great way for NBC to share results, data and photos. NBC received the National Environmental Achievement Award from NACWA for Excellence in E-media in January 2013 for the NBC Snapshot website.



## Eggnog Cheesecake

Recipe makes one 9" cake.

### Ingredients:

1 cup graham cracker crumbs  
 2 tablespoons white sugar  
 3 tablespoons melted butter  
 3 (8 ounce) packages cream cheese, softened  
 1 cup white sugar  
 3 tablespoons all-purpose flour  
 3/4 cup eggnog  
 2 eggs  
 2 tablespoons rum  
 1 pinch ground nutmeg



### Directions:

Preheat oven to 325 degrees F.

In a medium bowl combine graham cracker crumbs, 2 tablespoons sugar and butter. Press into the bottom of a 9 inch spring form pan. Bake in preheated oven for 10 minutes. Place on a wire rack to cool.

Preheat oven to 425 degrees F.

In a food processor combine cream cheese, 1 cup sugar, flour and eggnog; process until smooth. Blend in eggs, rum and nutmeg. Pour mixture into cooled crust. Bake in preheated oven for 10 minutes. Reduce heat to 250 and bake for 45 minutes, or until center of cake is barely firm to the touch. Remove from the oven and immediately loosen cake from rim. Let cake cool completely before removing the rim.

-- allrecipes.com

## NBC Employee Appreciation

### Field's Point: Tuesday December 12th.

11-7 shift: Breakfast at 5:30 AM.

7-3 shift (including maintenance): Lunch at 11:30 AM.

3-11 shift: Dinner at 6 PM.

### Bucklin Point: Wednesday December 11th.

7-3 shift: Lunch at 11:30 AM.

3-11 shift: Dinner at 6 PM.

### Bucklin Point: Thursday December 12th.

Split shift: Dinner 6 PM.

**IM:** Thursday December 12th at 11:30 AM

**COB:** Thursday December 12th at



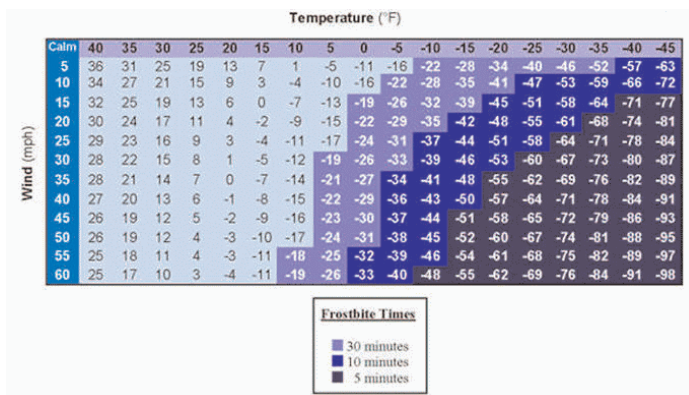
## Working Safely in Cold Weather

As temperatures begin to drop, all employees should be aware of the appropriate precautions to take while working outdoors. Remember to not only dress warmly, but more importantly try to stay dry in cold weather. In order to avoid hazards such as frostbite and hypothermia, several layers of loose-fitting, dry clothing should be worn at all times. Try to ensure that the outer layer of your work outfit is tightly woven and wind resistant in order to reduce the chance of body-heat loss by wind, and also try to wear wool or polypropylene inner layers of clothing, which will allow you to retain more body heat than cotton.

Staying dry while working outside is often times difficult, but can be achieved by wearing water-resistant gloves (with inner liners), boots, and coats. Remember that wet clothing chills the body rapidly, and excess perspiration will also increase heat loss, so try to remove extra layers of clothing whenever you feel too warm.

### Here are some more tips for working safely in cold weather:

- Avoid Exertion - Cold weather puts a strain on a person's heart; a person with heart disease or high blood pressure should always follow their doctor's advice about shoveling snow or performing other hard work in the cold.
- Avoid Skin Contact with Gasoline or Alcohol - Heat loss greatly increases when these substances come into contact with skin during cold weather. Wash your hands if this happens!
- Understand "Wind Chill" - The Wind Chill index is the temperature a person's body feels when the air temperature is combined with the wind speed. This is all based on the rate of heat loss from exposed skin caused by the effects of wind and cold. Employees should refer to the chart below for a more detailed understanding of the wind chill factor (index).



December EH&S Trainings will soon be posted on BayNet. As always, please obtain your supervisor's permission prior to registering for any safety training.

--Submitted by Dave Aucoin

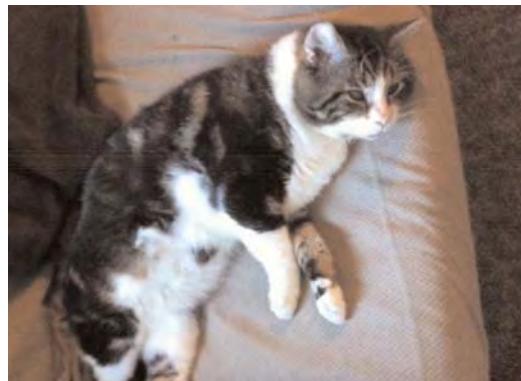
## Meet Some of NBC Employee's Adopted Pets...

Whether you adopt a pet from a local animal shelter or a rescue organization, humane society or SPCA, you're saving a life. You're making room for another pet to be rescued by allowing other dogs or cats at the shelter to be kept for a longer period of time, giving them a better shot at being adopted. Here are some of NBC's employees adopted furry friends...



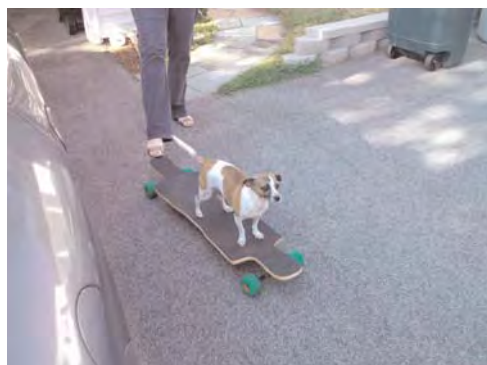
**Diane Buerger** and her husband have a Golden Retriever puppy named Gabriel and Gabriel now has a playmate! On November 19th Diane and her husband adopted a kitten

from the Potter League in Middletown. Her name is Roxie, she was abandoned with her siblings in a dumpster and her fur had signs of being burned. She is about 12 weeks old and not quite 3 pounds.



**Crystine Marandola** rescued a stray cat from her neighborhood this past summer. The cat had been lingering around her neighborhood since she moved in about five

years ago and each year he was getting more and more raggedy. Through sheer determination and some great ideas Crystine and her daughters captured the cat and gave him a good home, they named him Raggedy.



**Joyce Ranger's** dog Annabel was found in the snow two years ago and now she loves to sunbathe and skateboard.

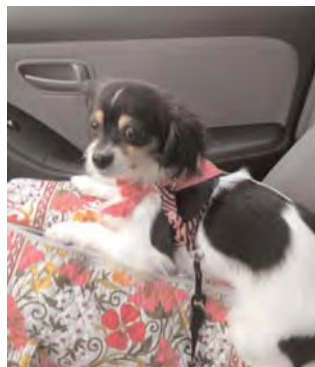


moves, though she does have her cuddly moments.

**Pam Reitsma** and her husband adopted a cat from It's All About the Animals Shelter in Rochester, MA last month. Her name is Savannah and she is about a year old. She loves to play and will attack anything that



**Sonia Martinez** rescued a Papillon/Chihuahua mix from a shelter in Arizona last year. His name is Louie and he is estimated to be about 2-3 years old. He loves cuddling, long walks in the park and chasing squirrels.



**Nicole Narducci** adopted a papillon 2 years ago from the Providence Animal Shelter, her name is Paisley and she is 4 years old now.

## Port of Providence Toy Drive

NBC will be joining other businesses in the Port of Providence in a toy collection for underprivileged children. Please consider donating an unwrapped, new toy which will make the holidays a little brighter for a local child.

**Toys can be dropped off at the COB Employee Appreciation Event on December 12th in the main conference room.**



# ***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@nartabay.com](mailto:jsamons@nartabay.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.

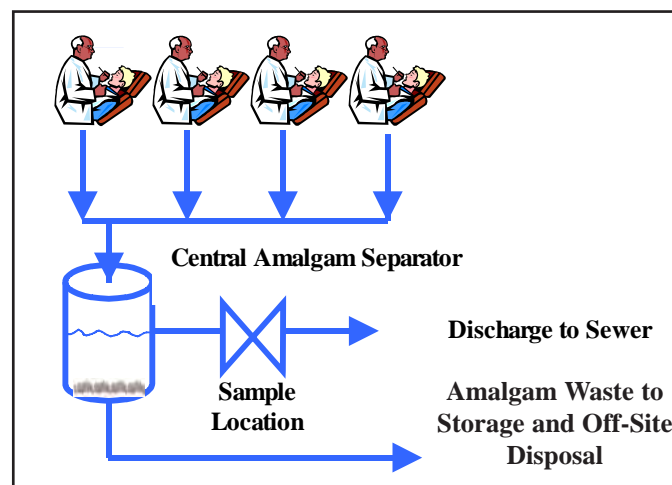
The NBC strongly encourages the use of ISO 11143 certified amalgam separators (Option 1). These separators help to remove most mercury from dental wastewater without being overly burdensome to operate or maintain. Based on NBC's current discharge limit for mercury, as little as 1/10,000 of a gram of 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.

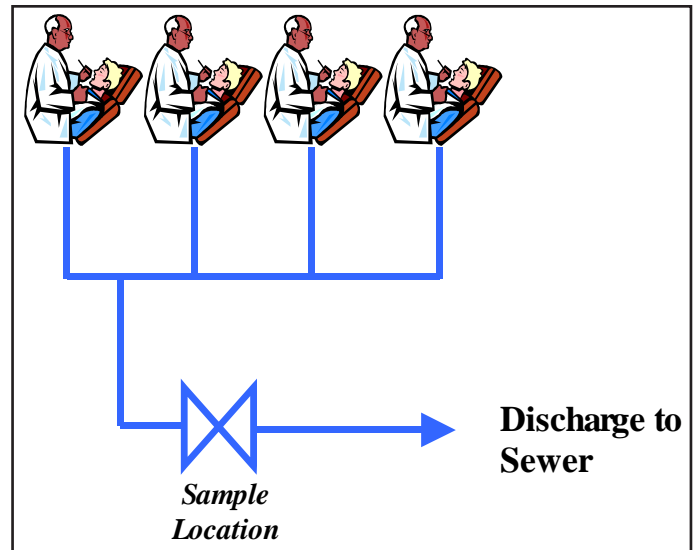
The wastewater sample collection valve must be configured and installed in such a manner that a representative sample of all and any amalgam containing wastewater can be collected at any time during normal operating hours. This will require the installation of a single central sampling location for all 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

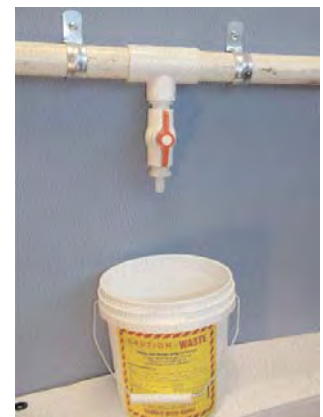
The dental facility must maintain compliance with NBC's discharge limits for mercury and silver. Facilities found to be in non-compliance must immediately notify NBC and initiate and continue to conduct weekly sampling of their wastewater discharges until compliance is established for four consecutive 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/gltopic/cfm?sectorid=131](http://www.glrppr.org/contacts/gltopic/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/topic/toc.cfm?hub=103&subsec=7&na=7](http://www.newmoa.org/prevention/topic/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?*

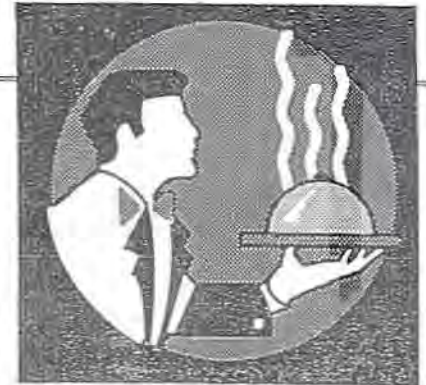
Grease discharges are predominantly generated from washing and cleaning operations and not from fryolators or deep frying units as most people might think. The pot washing sink, dishwasher pre-rinse station, and garbage grinder are the major sources of grease discharges to the sewer system.

## *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.

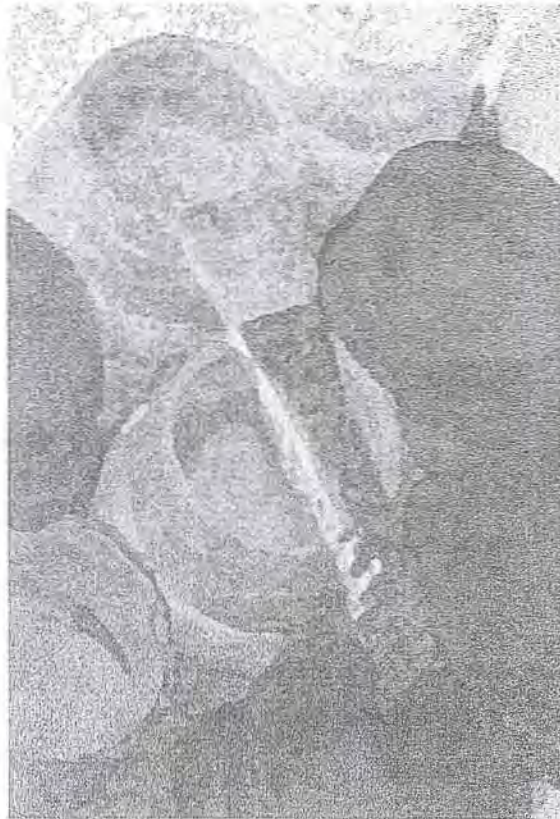
- Upon completing the discharge, the hauler must properly clean up and make the station neat and safe for the next hauler. This includes putting away all hoses, shutting all

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 comply with existing environmental regulations.

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.nrc.org/nrc/ehp/ehp/ehp\\_dspou\\_hoc.pdf](http://www.nrc.org/nrc/ehp/ehp/ehp_dspou_hoc.pdf)

A searchable health & safety database by medium: [www.ri-tlc.gov.ar/ehp/ehp/ehp\\_hoc.html](http://www.ri-tlc.gov.ar/ehp/ehp/ehp_hoc.html)

List of references and more:  
[www.library.unisa.edu.au/Internet/path/ind/art hazards.htm](http://www.library.unisa.edu.au/Internet/path/ind/art hazards.htm)  
Comprehensive list of articles, covering many mediums:  
[www.creoweb.com/creoweb/creoweb.html](http://www.creoweb.com/creoweb/creoweb.html)

List of books, periodicals and organizations:  
[http://www.ri-tlc.gov.ar/ehp/ehp/ehp\\_hoc.html](http://www.ri-tlc.gov.ar/ehp/ehp/ehp_hoc.html)

Comprehensive list of articles:  
[www.library.unisa.edu.au/Internet/path/ind/art hazards.htm](http://www.library.unisa.edu.au/Internet/path/ind/art hazards.htm)

Article entitled *Art, Environments and Hazards*:  
[http://www.ri-tlc.gov.ar/ehp/ehp/ehp\\_hoc.html](http://www.ri-tlc.gov.ar/ehp/ehp/ehp_hoc.html)

Very comprehensive list of resources for many media:  
[www.ri-tlc.gov.ar/ehp/ehp/ehp\\_hoc.html](http://www.ri-tlc.gov.ar/ehp/ehp/ehp_hoc.html)

Safety Primer with references:  
[www.ri-tlc.gov.ar/ehp/ehp/ehp\\_hoc.html](http://www.ri-tlc.gov.ar/ehp/ehp/ehp_hoc.html)

Safety Primers:  
[www.ri-tlc.gov.ar/ehp/ehp/ehp\\_hoc.html](http://www.ri-tlc.gov.ar/ehp/ehp/ehp_hoc.html)

www.ri-tlc.gov.ar/ehp/ehp/ehp\_hoc.html

www.gambianonline.com/safety.html

Studio Ventilation:  
[www.craftsupport.com/nyu/ehp/ehp\\_hoc.html](http://www.craftsupport.com/nyu/ehp/ehp_hoc.html)

How to manage contaminated rags:  
[www.coh.gov/ep/ehp/ehp\\_hoc.html](http://www.coh.gov/ep/ehp/ehp_hoc.html)

Technical Papers:  
[http://www.dandm.com/ehp/ehp\\_hoc.html](http://www.dandm.com/ehp/ehp_hoc.html)

# 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 solvent, 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 older 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 school or a materials exchange ([www.nrc.org/ehp/ehp\\_hoc.html](http://www.nrc.org/ehp/ehp_hoc.html)).

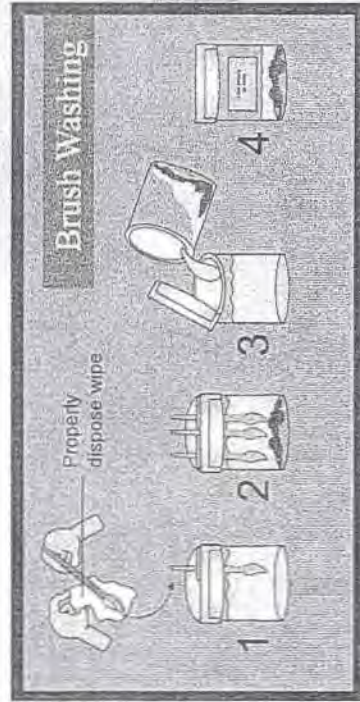


Exposure to solvents and toxic metals can be dangerous to your health. Common routes of exposure include ingestion, inhalation and absorption through the skin. Less toxic substances can often be used both in your painting process and for clean-up. Oil paint can be cleaned off hands and brushes with baby 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 trays, 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 fine 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.



MUNICIPAL owners must first brush. SOAK the suspended pigment vertically to pour this out.

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.rhodeisland.gov/ehs/ehs/waste/pdf/hwcompbk.pdf>, or call RIDEM at (401) 222-6800.

Pick up spills promptly and then safely reuse or properly dispose of the recovered material. Keep adequately socked 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 areas. 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	W/IV	HV <sub>avg</sub>	Exposure Limit (ppm)	Flash Point (F)	Vapor Pressure (mmHg)	Water Solubility (%)	Fire Hazard Classification	Notes:
Acetone	1.5	1.6	2	250	0	100	100	IB flammable	solvent, incorp. w/acids
2-Butoxyethanol	2.5	1.6	2	5	143	1	100	IIIA combustible	miscibility agent, skin adsorbs, incorp. w/caustics
D-Limonene	1.1	0.5	1	30	120	20	0	II combustible	has citrus odor
Ethyl Acetate	3.6	2.6	3.05	400	24	73	10	IB flammable	solvent, incorp. w/nitrates, alkalis & acids
Isopropyl Alcohol	1.4	1.5	1	400	53	33	100	IB flammable	solvent, incorp. w/acids and chlorine
Methyl Ethyl Ketone	3.9	1.6	3.5	200	16	78	28	IB flammable	paint remover, waste may fail TCLP, incorp. w/ ammonia
Methylene Chloride	3.3	2.8	3.05	25	none	350	2	— combustible	paint remover and carcinogen, T10, ODS, skin adsorbs
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	3.05	100	40	21	0	IB flammable	solvent, aromatic T10, skin adsorbs
Turpentine	na	na	na	100	95	4	0	IC flammable	thinner, skin adsorbs, incorp. w/ chlorine
Xylene	3.9	1.3	3	100	80	8	0	IC flammable	aromatic, skin adsorbs, incorp. 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 strippers, 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	3.05	0.10	5		0.002	Y	Y	skin adsorbs
Barium	0.4	0.8	1	none	100		0.5		Y (O) W (R) (B)	PEL is for soluble barium compounds
Cadmium	4.1	2.4	3.05	0.07	1	Y	0.005	Y	Y (O) W (R) (B)	a PBT according to the Ecology PBT Working List
Chromium	4.7	1.9	3.05	1.63	5		0.5		Y (O) W (R) (B) (G)	Hex chrome is more toxic than trivalent form
Copper	3.0	2.9	3.05	1.20	none		1.0		(B) (G) (B)	prevent skin & eye contact
Lead	4.1	2.6	3.05	0.29	5	Y	0.05	Y	Y (O) W (R) (B) (G)	prevent skin & eye contact
Mercury	4.0	1.7	3.05	0.005	0.2	Y	0.05		(O) (R)	volatile; prevent skin contact
Nickel	4.0	2.4	3.05	1.62	none		0.015	Y	(B)	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 433.1 (e), 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) but 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 Gidlin (RIDEEM), Alan Cantara (RISD), Rafael Cuello (NBC), Kathie Floreshelm (Photographer), Rebecca Proulx (RISL), Randall Rosenbaum (RISCA), and Barry Wojtkowicz (NBC).*

### RI Agencies Providing Further Information

**Narragansett Bay Commission (NBC)**  
(401) 461-8848 - [www.narrabay.com](http://www.narrabay.com)

**RI Department of Environmental Management (RIDEEM)**  
(401) 222-6822 - [www.state.nj.us/dem](http://www.state.nj.us/dem)

**RI Dept. of Health, Occupational Health & Safety Consultation Services**  
(401) 222-2438 - [www.health.state.nj.us/environment/occupational/Home.htm](http://www.health.state.nj.us/environment/occupational/Home.htm)

**RI Resource Recovery Corporation (RIRRC)**  
(401) 942-1430 - [www.rirrc.org](http://www.rirrc.org)

**RI School of Design (RISD)**  
(401) 454-6780 - [http://intranet.risd.edu/departments/default.asp?department=Environmental\\_Health\\_and\\_Safety](http://intranet.risd.edu/departments/default.asp?department=Environmental_Health_and_Safety)

**RI State Council on the Arts (RISCA)**  
(401) 222-3880 - [www.risca.state.nj.us](http://www.risca.state.nj.us)

### Other Agencies

**Art and Creative Materials Institute (ACMI)**  
(617) 426-6639 - [www.acmi.net.org](http://www.acmi.net.org)

**Arts, Crafts, and Theater Safety (ACTS)**  
(212) 777-0062 - [www.caseweb.com/acts](http://www.caseweb.com/acts)

**Massachusetts and Rhode Island Poison Center**  
(800) 222-1212 - [www.mariipoisoncenter.com](http://www.mariipoisoncenter.com)

**National Institute for Occupational Safety and Health (NIOSH)**  
(800) 336-5674 - [www.niosh.com/my](http://www.niosh.com/my)

**Occupational Safety and Health Administration (OSHA)**  
(202) 523-7075 - [www.osha.gov](http://www.osha.gov)

**RCRA Hotline**  
(800) 424-9346 - [www.epa.gov/epaoswer/hotline](http://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: B1112-085-0918

Company Name: **SUMMIT MANUFACTURING CORPORATION**

Facility Address: 248 Pine Street, Pawtucket, RI 02860

Mailing Address: 248 Pine Street, Pawtucket, RI 02860

Facility President: Mr. Paul Cotter

Facility Authorized Agent: Mr. Stephen Pogorilich

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. Paul Cotter and Summit Manufacturing Corporation**, 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 18 pages with conditions A - V.

**This permit is effective on October 1, 2013  
and expires on September 30, 2018.**

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

September 24, 2013  
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 agrees that the average discharge per calendar day of metal finishing process wastewater is greater than or equal to 10,000 gallons but less than 50,000 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 limitation 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 the permittee does not utilize or store cyanide on site. Since there are no cyanide processes utilized at the facility, the EPA Total Cyanide Metal Finishing Standards will be applied at the final process discharge location, Sample Location #1. Since the NBC Total Cyanide limitations are more stringent than the EPA Total Cyanide limitations at this location, 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 Anodizing Rinse Waters;
  - b. Treated Bright Dip Rinse Waters;
  - c. Treated Nitric Acid Solution;
  - d. Treated Alu-Kleen 1157 Cleaner Solution;
  - e. Treated Alum-Etch #3 Solution;
  - f. Treated Air Scrubber Wastewaters;
  - g. Treated reject stream generated from the two (2) AJ-20 diffusion dialysis units, servicing anodizing line B-1, Anodize Tank #8 and Hardcoat Tank #10;
  - h. Treated Cation Regenerant;
  - i. Treated Anion Regenerant.
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. Acidic Solutions with a pH less than 5.0 standard units;
  - b. Caustic Solutions with a pH greater than 11.0 standard units;
  - 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 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 submitted to the NBC by the permittee on May 15, 2009, May 27, 2009, and August 21, 2009. 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.

- The permittee is prohibited from discharging the following tanks without written permission from the NBC:

<u>Process Line</u>	<u>Tank</u>	<u>Solution</u>
B1	#6	Deoxide NC-9
B1	#8	Anodize
B1	#10	Hard Coat
B1	#12	Hard Coat
B1	#15	Black Dye
B1	#16	Dichromate Seal
B1	#18	Nickel Seal
B2	#4	Deoxide NC-9
B2	#13	Anodize
B2	#16	Blue Dye
B2	#21	Red Dye
B2	#18	Gold Dye
B2	#20	Gold Dye
B2	#22	Blue Dye
B2	#25	Green Dye
B2	#26	Copper Dye
B2	#27	Brown Dye
B2	#28	Nickel Seal

In order to obtain approval, the permittee must sample the above-listed tanks in accordance with Section E(3) of this permit.

- 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:**

- 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 - The upflow baffle of the final pH adjustment tank, collecting all process discharges specified in Section B(1)(a through h) 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 shall operate and maintain a pretreatment system in conformance with plans submitted to the NBC by AAFCO, Inc. on May 25, 1996, November 2, 1996, June 17, 1997, and January 20, 1999. 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 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. The permittee shall conduct sampling over one (1) full normal operating day during the months of January, February, March, April, May, June, July, August, September, October, November, 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 upflow baffle of the final pH adjustment tank, 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)	Lead (Total)	Silver (Total)
Chromium (Total)	Nickel (Total)	Zinc (Total)
Copper (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 E(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 upflow baffle 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. Prior to discharging any of the tanks listed in Section C(4), the permittee must submit a written request to discharge. The permittee must collect a grab sample prior to discharge. The sample must be collected, preserved, and analyzed in accordance with all EPA protocols for the following parameters:

Aluminum (Total)	Chromium (Total)	Nickel (Total)
Cadmium (Total)	Copper (Total)	Zinc (Total)
	Lead (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 process tanks. The permittee may only batch discharge the contents of the process tanks once approval is received from the NBC.

Table 2 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. 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.

## **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. 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 and chlorine residual 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. 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. 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.

**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. Summit Manufacturing Corporation shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Summit Manufacturing Corporation 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 Summit Manufacturing Corporation 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 Summit Manufacturing Corporation 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.

NPD: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**  
**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/1)</u></b>	<b><u>Monthly Average Concentration (mg/1)</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/1 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**

**Summit Manufacturing Corporation**  
**Sampling Requirements**

	<b>Sample Location #1</b> <b>Upflow Baffle of the</b> <b>Final pH Adjustment Tank</b>	
<b>Month</b>	<b>Composite Sample</b>	<b>Parameters</b>
January	X	Cr, Cu, Ni, Zn
February	X	Cr, Cu, Ni, Zn
March	X	Cr, Cu, Ni, Zn
April	X	Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN
May	X	Cr, Cu, Ni, Zn
June	X	Cr, Cu, Ni, Zn
July	X	Cr, Cu, Ni, Zn
August	X	Cr, Cu, Ni, Zn
September	X	Cr, Cu, Ni, Zn
October	X	Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN
November	X	Cr, Cu, Ni, Zn
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 ANODIZING WASTEWATERS**

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Summit Manufacturing Corporation

248 Pine Street

Pawtucket, RI 02860

**PERMIT NUMBER:** B1112-085-0918

**PERMIT EXPIRATION DATE:** 09/30/2018

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.

September 24, 2013  
Initial Date of Issuance

/s/ Kerry M. Britt  
Kerry M. Britt, Pretreatment Manager

***TYPICAL PHARMACEUTICAL  
WASTEWATER DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: B1404-015-0317

Company Name: **DENISON ACQUISITION COMPANY, LLC D/B/A  
DENISON PHARMACEUTICALS, LLC**

Facility Address: 1 Powder Hill Road, Lincoln, RI 02865

Mailing Address: 1 Powder Hill Road, Lincoln, RI 02865

Facility President: Mr. Bradley S. Stone

Facility Authorized Agent: Mr. Bradley S. Stone

User Classification: Pharmaceutical Manufacturing Operations

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. Bradley S. Stone and Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, 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 - V.

**This permit is 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 23, 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 19, 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 ppm and the monthly average of 8.2 ppm for 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 ppm and the monthly average limit of 0.7 ppm for methylene chloride. 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 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 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 facilities:
  - a. Treated Process Tank Washwater;
  - b. Treated Laboratory Glassware Washwater;
  - c. Reverse Osmosis Reject Wastewater;

- d. Carbon Filter Backwash;
  - e. Softener Regenerant Wastewater;
  - f. Treated Air Compressor Condensate;
  - g. Non-Contact Cooling Water.
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. Off-specification Product Batches;
  - b. Concentrated Raw Materials and Solutions;
  - c. Acidic Solutions with a pH less than 5.0 standard units;
  - d. Caustic Solutions with a pH greater than 11.0 standard units;
  - e. Degreasing Solutions;
  - f. Solvents;
  - g. Sludges;
  - h. Fuel or Lubricating Oils;
  - i. Laboratory Chemicals.
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 19, attached hereto and incorporated herein.
3. The permittee may only treat and/or discharge those solutions that were indicated as such on plans submitted to the NBC by the permittee on February 13, 2012. 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 one sample location must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - Effluent monitoring station, 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 and with the EPA Pharmaceutical Manufacturing Standards referenced in Section A(4) of this permit.

2. The permittee shall provide additional pretreatment of the process wastewater discharges listed in Section B(1) above if determined necessary by the NBC to ensure that effluent limitations are met at all times. Plans of additional pretreatment systems must be submitted to the NBC for approval before beginning construction.
3. The permittee shall operate and maintain a pretreatment system in conformance with plans submitted to the NBC on February 13, 2012. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.
4. 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(1) 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 first four batch discharges, the permittee shall collect seven (7) grab samples from the effluent monitoring station, Sample Location #1, after treatment and just prior to discharge.

- a. The first grab sample from each batch discharge is 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. The second grab sample from each batch discharge 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

- c. The third grab sample from each batch discharge 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

- d. The fourth grab sample from each batch discharge 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.



e. The fifth grab sample from each batch discharge is to be collected in a 1000 ml (minimum) 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.

f. The sixth grab sample from each batch discharge must be collected in a glass bottle, preserved according to EPA protocols and must be analyzed for the following parameter:

Total Oil and Grease (fats, oils, and grease)

g. The seventh grab sample from each batch discharge is to be collected, preserved, and analyzed according to EPA protocols for the following parameters:

Biochemical Oxygen Demand (BOD)  
Total Suspended Solids (TSS)

h. The analytical results are to be received by the NBC by May 30, 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. During the months of January, April, July, and October, until the expiration date of this permit, the permittee must conduct sampling from the effluent monitoring station, Sample Location #1, while a batch discharge is occurring.

a. During the months of January, April, July, and October, one 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. During the months of January, April, July, and October, during the same batch discharge that samples in Section E(3)(a) are collected, one 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. During the months of April and October, during the same batch discharge that samples in Section E(3)(a) are collected, one grab sample 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. During the months of April and October, during the same batch discharge that samples in Section E(3)(a) are collected, one grab sample is to be collected in a 1000 ml (minimum) 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. During the months of January, April, July, and October, until the expiration date of this permit, one grab sample must be collected in a glass bottle. The samples collected during April and October must be collected from the same batch discharge that is being sampled in Section E(3)(a). 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. During the months of January, April, July, and October, until the expiration date of this permit, the permittee must collect one grab sample. The samples collected during April and October must be collected from the same batch discharge that is being sampled in Section E(3)(a). The grab sample is to be collected, preserved, and analyzed according to EPA protocols for the following parameters:

Copper (Total)          Zinc (Total)

- g. During the months of January, April, July, and October, until the expiration date of this permit, the permittee must collect one grab sample. The samples collected during April and October must be collected from the same batch discharge that is being sampled in Section E(3)(a). The grab sample is to be collected, preserved, and analyzed according to EPA protocols for the following parameter:

Biochemical Oxygen Demand (BOD)  
Total Suspended Solids (TSS)

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. 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.

#### **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. 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 and chlorine residual 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. 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:**

Within one (1) month from the effective date of this permit, the permittee must complete and submit the NBC guidance document entitled Spill and Slug Prevention Control Plan for NBC Sewer Users. This plan shall include detailed plans of equipment and structures that have been or will be installed to prevent incidental or accidental spills of untreated wastewater, raw materials, and/or hazardous materials from entering the NBC facilities. This plan shall include a description of the operating procedures to contain and handle the spill and shall address all items in the enclosed copy of the plan. The permittee must obtain NBC approval of the Spill and Slug Prevention Control Plan. Within one (1) month from the approval date of the Spill and Slug Prevention Control Plan, the permittee must implement the NBC approved Spill and Slug Prevention Control Plan and must maintain the plan in effect at all times.

## **H. Toxic Organic/Solvent Management Plan:**

Within one (1) month from the effective date of this permit, the permittee must submit the NBC guidance document entitled Toxic Organic/Solvent Management Plan. This plan must specify the toxic organic compounds used, the method of disposal used instead of dumping, and procedures for ensuring that toxic organic compounds do not routinely spill or leak into the NBC wastewater system. The permittee must obtain NBC approval of the Toxic Organic/Solvent Management Plan. Within one (1) month from the approval date of the Toxic Organic/Solvent Management Plan the permittee must implement the approved Toxic Organic/Solvent Management Plan and maintain all associated facilities to ensure that toxic organic compounds are not routinely discharged or spilled into the NBC sewer system. A list of toxic organic compounds and a sample Toxic Organic/Solvent Management Plan are 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. 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.

**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. Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, 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 Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, 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 Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC 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.

NPD: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
- Toxic Organic/Solvent Management Plan
- List of Toxic Organic Compounds
- Spill and Slug Prevention Control Plan

**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**

**Denison Acquisition Company, LLC d/b/a**  
**Denison Pharmaceuticals, LLC**

**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**

**Denison Acquisition Company, LLC d/b/a**  
**Denison Pharmaceuticals, LLC**  
**Sampling Requirements**

<b>Sample Location #1</b>		
<b>Effluent Monitoring Station</b>		
<b>Month</b>	<b>Grab Sample</b>	<b>Parameters</b>
January	X	Cu, Zn, O&G, Acetone, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Methylene Chloride, BOD, TSS
February		
March		
April	X	Cu, Zn, O&G, VOC, EXT, Acetone, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Methylene Chloride, BOD, TSS
May		
June		
July	X	Cu, Zn, O&G, Acetone, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Methylene Chloride, BOD, TSS
August		
September		
October	X	Cu, Zn, O&G, VOC, EXT, Acetone, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Methylene Chloride, 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	O & G - Total Oil and Grease (fats, oils, and grease)
CN - Cyanide	Zn - Zinc	VOC - Volatile Organic compounds Portion of TTO List
		EXT - Extractable Portion of TTO List

# CERTIFICATE TO DISCHARGE

the following types of process water:

TREATED PROCESS TANK WASHWATER, LABORATORY GLASSWARE WASHWATER, REVERSE OSMOSIS WASTEWATER, AIR COMPRESSOR CONDENSATE, NON-CONTACT COOLING WATER

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC

1 Powder Hill Road

Lincoln, RI 02865

**PERMIT NUMBER:** B1404-015-0317

**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 23, 2012  
Initial Date of Issuance

/s/ Nathan J. Dean  
Nathan J. Dean, Assistant Pretreatment Manager



***TYPICAL METAL FORMER  
WASTEWATER DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: B1506-016-0418

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 J. Kowalski

Facility Authorized Agents: Mr. Michael Kane, Mr. Gregory J. 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 J. 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 on May 1, 2013  
and expires on April 30, 2018.**

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 26, 2013  
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;
  - m. Eye Wash Station Discharge.
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. Stamp & Strike Annealing Oven Non-Contact Cooling Water;
  - j. Wet Grinding/Sanding Wastewaters;
  - k. Filtered Polishing Wastewaters;
  - l. Cooling Tower Discharges;
  - m. Electroplating Solutions;
  - n. Acetone Dip Tank Solutions;
  - o. Isopropyl Alcohol;
  - p. Isopropyl Alcohol-Castor Oil Solutions;
  - q. Cyanide Solutions;
  - r. Acidic Solutions with a pH less than 5.0 standard units;
  - s. Caustic Solutions with a pH greater than 11.0 standard units;
  - t. Degreasing Solutions;
  - u. Solvents;
  - v. Sludges;
  - w. 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 from the permittee on August 15, 2000, June 2, 2003, January 29, 2004, October 20, 2009, March 25, 2010, August 16, 2010, December 15, 2010, March 5, 2012, May 31, 2012, and December 12, 2012. 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)(l) 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 29, 2004, October 19, 2006, and July 16, 2012. 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 and maintain a Zero Process Discharge Wastewater Recycle Pretreatment System as illustrated in the plans that have been received by the NBC on January 29, 2004, October 12, 2004, November 8, 2004, March 16, 2006, October 19, 2006, March 18, 2008, July 10, 2009, August 31, 2009, March 23, 2010, December 15, 2010, July 11, 2011, December 2, 2011, April 26, 2012, June 18, 2012, July 2, 2012, July 12, 2012, and May 1 2013. This system shall be used specifically for the purpose of recycling wastewater or eliminating discharges from the following operations:
  - a. Ultrasonic Cleaner 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. Isopropyl Alcohol Recycling Operations;
  - i. Solvent Cleaning Unit Operations;
  - j. Rhodium Plating Operations;
  - k. Stamp & Strike Annealing Oven Non-Contact Cooling Water;
  - l. Castor Oil-Isopropyl Alcohol Operations;
  - m. Acetone Dip Tank 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 29, 2004, October 12, 2004, November 8, 2004, March 16, 2006, October 19, 2006, March 18, 2008, July 10, 2009, August 31, 2009, March 23, 2010, December 15, 2010, July 11, 2011, December 2, 2011, April 26, 2012, June 18, 2012, July 2, 2012, July 12, 2012, and May 1, 2013 may be treated on-site in the pretreatment equipment.
3. If any problems with the zero discharge systems arise, or if the permittee would like to connect to the sewer for the purpose of discharging wastestreams 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 process tanks, recycle systems, evaporation systems, or associated piping.
4. The permittee has capped off and sealed all sewer drain lines associated with the process operations identified in Section E(1) above. They must remain capped off and sealed so that no process wastewater may be discharged to the sewer through sanitary or any other sewer connections from the zero discharge operations.
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. 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 and Company 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
- 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>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)*	0.06	0.04
Copper (Total)*	0.60	0.59
Cyanide (Total)*	0.24	0.24
Silver (Total)*	0.20	0.10

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:** B1506-016-0418

**PERMIT EXPIRATION DATE:** 04/30/2018

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 26, 2013  
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: B1604-007-0417

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 Agent: Mr. Michael Baier

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 21 pages with conditions A - X and Attachment A.

**This permit is effective upon receipt  
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

July 26, 2013  
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 19, 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 has submitted an engineering study on June 29, 2012, August 14, 2012, and August 17, 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 Wastewaters;
  - 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 prohibited from batch discharging the entire contents of the heat recovery steam generator without first obtaining approval from the NBC. In order to obtain approval, the contents of the heat recovery steam generator must be sampled in accordance with Section G(7) of this permit.

4. 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 19, attached hereto and incorporated herein.
5. 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 February 17, 1994. 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.
6. 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 five (5) 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.

Sample Location #5 - Sample port on the discharge pipe of the heat recovery steam generator blowdown line, collecting all process discharges specified in Section B(1)(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 Locations #1, #2, #3, #4, and #5 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 G(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).

If no discharges occur from heat recovery/steam generating, equipment washing, and/or floor washing operations during the required sampling month, the permittee must notify the NBC in writing and sample the next heat recover/steam generating, equipment washing, and/or floor washing event.

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.

4. 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.

5. 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.



6. 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.

7. Prior to batch discharging the contents of the heat recovery steam generator, the permittee must collect two (2) grab samples from the sample port on the discharge pipe of the heat recovery steam generator blowdown line, Sample Location #5. One 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)

The other grab sample must be collected in a glass bottle, preserved, and analyzed separately in accordance with EPA protocols for the following parameter:

Total Oil and Grease (fats, oils, and grease)

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 heat recovery steam generator. The permittee may only batch discharge the contents of the heat recovery steam generator once approval is received from the NBC.

Table 3 attached hereto summarizes the sampling requirements for this facility.

8. 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.

9. 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.
10. 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.
11. 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: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**  
**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**  
**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*	chlordanes
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 (as azobenzene)	<b>Other Toxic Pollutants and Total Phenol</b>
<b>Acid Compounds</b>	fluoranthene*	Antimony, Total
	fluorene*	Arsenic, Total
	hexachlorobenzene	Beryllium, Total
2-chlorophenol	hexachlorobutadiene	Cadmium, Total
2,4-dichlorophenol	hexachlorocyclopentadiene	Chromium, Total
2,4-dimethylphenol	hexachloroethane	Chromium, Hexavalent
4,6-dinitro-o-cresol	indeno (1,2,3-cd) pyrene*	Copper, Total
2,4-dinitrophenol	isophorone	Lead, Total
2-nitrophenol	nitrobenzene	Mercury, Total
4-nitrophenol	n-nitrosodimethylamine	Nickel, Total
p-chloro-m-cresol	n-nitrosodi-n-propylamine	Selenium, Total
Pentachlorophenol	n-nitrosodiphenylamine	Silver, Total
Phenol	Phenanthrene*	Thallium, Total
2,4,6-trichlorophenol	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:** B1604-007-0417

**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.

July 26, 2013

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: P4100-096-1018

Company Name: **PRECISION INDUSTRIES, INC.**

Facility Address: 501 Valley Street, Providence, RI 02908

Mailing Address: 501 Valley Street, Providence, RI 02908

Facility President: Mr. Scott Young

Facility Authorized Agent: Mr. Scott Young

User Classification: Recycled Electro-Etching and Machinery 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. Scott Young and Precision Industries, 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 November 1, 2013  
and expires on October 31, 2018.**

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

October 25, 2013  
Date

**Mr. Scott Young and Precision Industries, Inc.** hereby consents to this Zero Process Wastewater-Sanitary Discharge Permit. In so consenting, appropriate officers of **Precision Industries, Inc.** have personally read and understood each of the numbered provisions in this Zero Discharge Permit. This permit allows **Precision Industries, 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 Recycle Pretreatment System as proposed in the plans that have been received by the NBC on October 1, 2008. This pretreatment system shall be used specifically for the use of recycling wastewater or eliminating discharges from the following operations:
  - a. Electro-Etching;
  - b. Blackening;
  - c. Grinding;
  - d. Electrical Discharge Machining.
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 October 1, 2008 may be treated on-site in the pretreatment equipment.
3. If any problems with the evaporation 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 pretreatment evaporation 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. Electro-Etching Wastewaters;
  - b. Blackening Wastewaters;
  - c. Electroplating/Metal Finishing Wastewaters;
  - d. Cooling Wastewaters;
  - e. Grinding/Machinery Wastewater;
  - f. Rinse Solutions;
  - g. Soap Cleaning Solutions;
  - h. Cyanide Solutions;
  - i. Acid/Alkaline Solutions;
  - j. Vibratory/Tubbing Wastewaters;
  - k. Metal Cleaning Solutions;
  - l. Degreasing Solutions;
  - m. Solvents;
  - n. Sludges;
  - o. Fuel or Lubricating Oils.
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 pretreatment system including, but not limited to, the following:
  - a. Amount of sludge generated on a monthly basis;
  - b. Completed manifest forms for hazardous materials;
  - c. Maintenance performed on the pretreatment 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:**

The permittee shall submit written certification monthly stating that the permittee has made no process wastewater discharges to the sewer during the previous one (1) month period. This certification must be received within thirty (30) days from the end of the required reporting month. This certification must contain monthly water meter readings 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, 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.

## **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. Precision Industries, Inc. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Precision Industries, 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 Precision Industries, 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 Precision Industries, 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.

THC:AB:smb

Attachments:

- Designation of Authorized Agent Form
- RCRA Handbook
- Monthly Zero Process Wastewater Discharge Certification

**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.

**Attachment A**

**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 02905-5502

I, \_\_\_\_\_, as authorized representative of \_\_\_\_\_, do hereby decree that no process wastewater was discharged into the Narragansett Bay Commission sewer system for the past month.

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: B8000-127-0817  
Company Name: **RAY PLANTE & SONS, INC.**  
Company President: Raymond L. Plante, Jr.  
Facility Address: 1 Abbotts Crossing Road, Coventry, RI 02816  
Mailing Address: 1 Abbotts Crossing Road, Coventry, RI 02816  
DEM License Number: RI-520

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 **Raymond L. Plante, Jr. and Ray Plante & Sons, Inc.**, 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 September 1, 2012  
and expires on August 31, 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

August 21, 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 B8000-127-0817  
Attachment A  
Ray Plante & Sons, Inc.

**PERMITTED VEHICLES:**

VEHICLE TYPE	REGISTRATION NUMBER	TRUCK VIN NUMBER	CAPACITY (GALLONS)
CAB	63651	2FUYFXYP9WA991432	
TANK TRAILER	36581	MS94219	5,200

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: P8501-326-0418

Company Name: **EMMILY'S FAMILY STYLE RESTAURANT AND GRILLE**

Facility Address: 1525 Smith Street, North Providence, RI 02911

Mailing Address: 1525 Smith Street, North Providence, RI 02911

Facility Member: Ms. Patricia Noriega

Facility Authorized Agent: Ms. Patricia Noriega

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), **Ms. Patricia Noriega and Emmily's Family Style Restaurant and Grille**, 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 upon receipt  
and expires on April 30, 2018.**

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/ Nathan J. Dean  
Nathan J. Dean, Assistant Pretreatment Manager  
Narragansett Bay Commission

June 7, 2013  
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 May 8, 2013. 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 limited liability company. The permittee shall ensure the limited liability company be registered with the Rhode Island Secretary of State Corporations Division. Emmily's Family Style Restaurant and Grille shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Emmily's Family Style Restaurant and Grille 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 Emmily's Family Style Restaurant and Grille 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 Emmily's Family Style Restaurant and Grille 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.

NA:NJD: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 DISH, POT, AND EQUIPMENT WASHWATER,  
TREATED FOOD PREPARATION WASTEWATER**

---

into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Emmily's Family Style Restaurant and Grille

1525 Smith Street

North Providence, RI 02911

**PERMIT NUMBER:** P8501-326-0418

**PERMIT EXPIRATION DATE:** 04/30/2018

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 7, 2013

Initial Date of Issuance

/s/ Nathan J. Dean

Nathan J. Dean, Assistant Pretreatment Manager

***TYPICAL DENTIST/X-RAY  
PROCESSING WASTEWATER  
DISCHARGE PERMIT***



# WASTEWATER DISCHARGE PERMIT

Permit Number: P9400-325-1217

Company Name: **ZUMSTEIN FAMILY DENTISTRY, LLC**

Facility Address: 159 Governor Street, Providence, RI 02906

Mailing Address: 159 Governor Street, Providence, RI 02906

Facility Owner: Dr. Justin Zumstein

Facility Authorized Agent: Dr. Justin Zumstein

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. Justin Zumstein and Zumstein Family Dentistry, 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 15 pages with conditions A - U and Attachment A.

**This permit is effective upon receipt  
and expires on December 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

February 8, 2013  
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 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.
3. 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.
4. 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 September 17, 2008. The amalgam separator shall be fully operational whenever discharges from dental procedures are occurring.
5. 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.
6. The permittee shall install 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.
7. 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.
8. 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.

9. 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 January to December. 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 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 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 limited liability company. The permittee shall ensure the limited liability company be registered with the Rhode Island Secretary of State Corporations Division. Zumstein Family Dentistry, LLC shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Zumstein Family Dentistry, 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 Zumstein Family Dentistry, 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 Zumstein Family Dentistry, LLC 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.

KCG:NJD:smb

#### 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**  
**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.



**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>OTHER TOXIC POLLUTANTS AND TOTAL PHENOL</b>
		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)

**Attachment A**

**Best Management Practice Certification**

For the 12-month period from \_\_\_\_\_, 20\_\_ to \_\_\_\_\_, 20\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
Commission \_\_\_\_\_  
\_\_\_\_\_

**RETURN TO:**  
Narragansett Bay  
  
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 WASTEWATER CONTAINING AMALGAM,  
DENTAL PROCESS WASTEWATER**

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into the facilities of the

## Narragansett Bay Commission

is hereby granted to:

Zumstein Family Dentistry, LLC

159 Governor Street

Providence, RI 02906

**PERMIT NUMBER:** P9400-325-1217

**PERMIT EXPIRATION DATE:** 12/31/2017

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.

February 8, 2013  
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





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.





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.

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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  
chlordane  
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. \_\_\_

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(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? \_\_\_\_\_

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(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

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**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: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



***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:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**What will be required of firm?** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

***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: _____		
_____		
_____		



***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.



**The Narragansett Bay Commission**  
Pretreatment Program  
2 Ernest Street  
Providence, RI 02905

**Bucklin 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)

	<b>#1</b>	<b>#2</b>	<b>#3</b>
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 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).

---

---

**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 NBC ENFORCEMENT  
LETTERS, NOTICES, AND ORDERS***

NOTICE OF VIOLATION  
FAILURE TO MEET STANDARDS (USER SAMPLE)



September 23, 2013

Mr. David Brown  
A & H Manufacturing Company  
P.O. Box 19720  
Johnston, RI 02919

Dear Mr. Brown:

The sample results for which were received by this office on September 12, 2013 indicate that you are in violation of discharge limitations for the following:


**Sample Location # 1**

Sample Date	Chemical	Sample Type	Sample Result	Standard Type	Max. Limit	Avg. Limit
8/30/2013	COPPER	Composite	8.66	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,



Kyle C. Gannon  
Pretreatment Technician

NOTICE OF VIOLATION  
FAILURE TO MEET STANDARDS (NBC SAMPLE)



Mr. Joseph Accaoui  
Tanury Industries  
6 New England Way  
Lincoln, RI 02865

October 31, 2013

Dear Mr. Accaoui:

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 October 10, 2013. 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
10/10/2013	NICKEL	Composite	2.56	LOCAL	1.62	1.62

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,

Abigail Bernier  
Principal Pretreatment Eng.



## WASTEWATER SAMPLE ANALYSIS

Company Name: Tanury Industries  
Company Address: 6 New England Way  
Lincoln, RI 02865  
Location Name: Sample Location # 1  
Type of Sample: Composite  
Date of Sample: October 10, 2013

Parameter	Concentration (mg/l)
CADMIUM	0.015
CHROMIUM	0.202
COPPER	0.925
CYANIDE	0.019
LEAD	0.075
NICKEL	2.56
SILVER	0.036
ZINC	0.082

Review By:

Abigail Bernier  
Principal Pretreatment Eng.

NOTICE OF VIOLATION  
AVERAGE LIMIT VIOLATION



December 10, 2013

Mr. Lawrence Gallagher  
Liquid Blue  
1 Crownmark Drive  
Lincoln, RI 02865

Dear Mr. Gallagher:

The results of sampling conducted at your firm for the month of October - 2013 show that you are in violation of average discharge limitations for the following:

Sample Location #2	Parameter	#Of Analyses	Standard Type	Avg Conc.	Avg Limit	Type
	Copper	3	Local	3.97	1.2	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 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 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.

Sincerely,

Kyle Gannon  
Pretreatment Technician

KG:sm

Notice of Violation  
Failure to Meet Standards (Manhole)



May 9, 2013

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 March 27 through March 28, 2013 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	1.27	1.20	1.20
Nickel	Composite	1.73	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 June 15, 2013 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: March 27 and 28, 2013  
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	1.27
Lead	<0.075	<0.075
Nickel	<0.05	1.73
Silver	<0.025	<0.025
Zinc	<0.06	0.134
Cyanide	<0.004	0.0211
pH (standard units)	7.2	7.2

Reviewed by:

Nathan J. Dean  
Assistant Pretreatment Manager

**Notice of Violation  
Failure to Immediately Report Violation**



August 22, 2013

Mr. David Brown  
A & H Manufacturing Company  
P.O. Box 19720  
Johnston, RI 02919

Dear Mr. Brown:

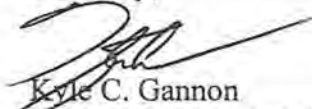
The Self-Monitoring Compliance report which was received by this office on August 15, 2013 indicated non-compliance with the NBC discharge limitations. U.S. E.P.A. regulations, 40 C.F.R. 403.12g(2), require that you notify the Commission within 24 hours of becoming aware of this violation.

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,

  
Kyle C. Gannon  
Pretreatment Technician

NOTICE OF VIOLATION  
NOTICE OF PH VIOLATIONS



April 02, 2013

Mr. Joseph Accaoui  
Tanury Industries  
6 New England Way  
Lincoln, RI 02865

Dear Mr. Accaoui:

I have reviewed the February pH Monitoring Report submitted on March 28, 2013. Based upon this report, your facility has exceeded the pH discharge limitation as follows:

LOW LIMIT VIOLATIONS

5

HIGH LIMIT VIOLATIONS

2

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.



November 08, 2013

Mr. John Raposa  
JAR Bakers Supply  
12 Crow Point Road  
Lincoln, RI 02865

Dear Mr. Raposa:

The sampling results for October which were received by this office on November 04, 2013 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
10/23/2013	TSS	GRAB	4570	300
10/23/2013	BOD	GRAB	26090	300

Exceeding the BOD or TSS standards of 300 ppm will be permitted but may be subject to a surcharge. The NBC 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,  
  
Brian E. Steere  
Pretreatment Technician

NOTICE OF VIOLATION  
FAILURE TO SUBMIT COMPLIANCE REPORT

October 31, 2013



Mr. Albert Jacavone  
Al-Jac Produce  
33 Hemlock Street  
Providence, RI 02908

Dear Mr. Jacavone:

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**  
July-2013

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



Kyle C. Gannon  
Pretreatment Technician

NOTICE OF VIOLATION  
FAILURE TO SUBMIT PH MONITORING REPORT



December 02, 2013.

Mr. Thomas Perkins  
R. E. Sturdy Company, Inc.  
928 Eddy Street  
Providence, RI 02905

Dear Mr. Perkins:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit pH results for the month(s) of:

**Sample Location # 1**  
October 2013

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 "Abigail Bernier".

Abigail Bernier  
Principal Pretreatment Eng.

**NOTICE OF VIOLATION  
FAILURE TO SUBMIT BMP CERTIFICATION**



December 5, 2013

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:

**BMP Certification**

October - 2013

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:sm

NOTICE OF VIOLATION  
FAILURE TO SUBMIT CERTIFICATION OF NO DISCHARGE



December 3, 2013

Mr. Mark Cunniff  
JC Gorham  
625 Harris Avenue  
Providence, RI 02909

Dear Mr. Cunniff:

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:

October 2013

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,

A handwritten signature in cursive script that reads "Ian E. Jardin".

Ian E. Jardin  
Pretreatment Engineer

IEJ:smb



**Notice Of Violation  
Failure To Analyze for All Required Parameters**



November 14, 2013

Mr. James R. Brown  
JRB Associates Inc.  
94 Silver Spring Street  
Providence, RI 02904

Dear Mr. Brown:

I have reviewed the October 2013 self-monitoring compliance report you submitted on November 12, 2013. In accordance with the conditions of your permit, you were to have analyzed Sample Location # 8 for SILVER. The aforementioned sample was not analyzed for SILVER. In order to fulfill this monitoring requirement, you must take an additional sample for the aforementioned parameter(s) by November 19, 2013. The sample must be analyzed for SILVER and the analytical results must be received by December 19, 2013.

If you have any questions regarding this matter, please contact me 461-8848

Sincerely

A handwritten signature in cursive script, appearing to read "Ian E. Jardin".

Ian E. Jardin  
Pretreatment Engineer

NOTICE OF VIOLATION  
FAILURE TO SATISFY NBC REQUIREMENTS



August 01, 2013

Mr. Dan McComiskey  
DJM Wholesale  
25 Eagle Square  
Providence, RI 02903

Dear Mr. McComiskey:

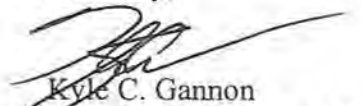
Per the requirements of letter(s) from this office, the following item was required to be completed and/or submitted by the due date indicated below:

Required Submittal	Notice	Issue Date	Due Date
Pretreatment Plans	Letter	6/5/2013	6/26/2013

You must satisfy the past due NBC requirement as detailed in the above referenced documents. 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 or 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

**Notice of Violation**  
**Letter of Deficiency**

February 1, 2013

Mr. James Brown  
JRB Associates, Inc.  
94 Silver Spring Street  
Providence, RI 02904



**Certified Mail**  
**Return Receipt Requested**

91 7108 2133 3937 9340 6696

Dear Mr. Brown:

During the annual Narragansett Bay Commission (NBC) inspection of your facility, conducted on January 16, 2013, the following deficiency was noted:

1. Your firm has not been reporting and recording effluent pH values as accurately as required by the NBC. Effluent pH values must be reported directly to from the chart to an accuracy of 0.1 standard units. Please do not hesitate to contact this office if you have any questions regarding the NBC reporting and recording requirements. NBC staff is available to provide assistance regarding this matter.

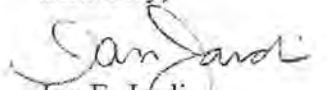
Failure to correct the deficiency within the timeframe specified could result in the initiation of enforcement action against your firm. Please note that the NBC can assess administrative penalties of up to \$25,000 per violation per day. In addition to correcting the aforementioned deficiency, you must do the following:

2. During the inspection, you indicated that you will not implement several approved changes to the process operations. To ensure plans on file are accurate, you must submit "as built" plans of your facility as well as an updated tank schedule. Enclosed, please find the Process Operations and Pretreatment Systems Checklists. All the information indicated on these checklists must be shown on the plans. The plans and tank schedule must be received by February 28, 2013.

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.

If you have any questions, please contact me at 461-8848 ext. 490.

Sincerely,

  
Ian E. Jardin  
Pretreatment Engineer

IEJ:rg

Enclosures

**JRB Associates, Inc.**  
**PLANS OF PROCESS OPERATIONS**

The information with an "X" before it must be shown on the plan or submitted before the plans of the wet process operations can be approved.

1.  All tanks, their contents and volume. Please note compartmentalized tanks must be indicated as such.
2.  Any other water using processes (i.e. rectifiers, tubing, cooling water, etc.).
3.  Whether each tank will be batch discharged, continuously discharged, or not discharged.
4.  Where the tank discharges to (i.e. pH neutralization, cyanide destruct, A/A treatment, process operation tank, etc.).
5.  The volume and dump frequency of each batch discharge.
6.  The flow rate for continuous discharges.
7.  All floor drains, trenches, berms, sumps, pump stations, piping, valves, and the point of discharge of each tank or pipe.

Please note, process operation and pretreatment system plans must be at least 11" x 17" and cannot exceed 36" x 24" in size.

**JRB Associates, Inc.**  
**PRETREATMENT SYSTEM PLANS**

The information with an "X" before it must be shown on the plan or submitted before the pretreatment system plans can be approved.

1. X All wastewater treatment tanks/component equipment, including filters, ion exchange columns, membrane-type equipment etc., their size, material of construction, and the projected daily flows to each treatment process including backwash, regeneration rinse, maintenance, and cleaning flow rates and duration of each.
2. X All pumps, piping, valves, mixers, controls, instrument probes, etc. Valve schedules referencing all operational modes of equipment, etc. All tanks and discharges must be hard-piped with PVC, CPVC or other chemically compatible piping. The firm may apply for special case variances to use short sections of flexible hose. These requests will be reviewed on a case by case basis.
3. X A description of the treatment procedure for each treatment process including but not limited to acid/alkali, cyanide destruct, pH adjustment, ion exchange column regeneration, and backwash procedures. Procedures must include valve sequences showing all operational modes.
4. X A process schematic of the pretreatment system. For pretreatment systems which utilize filter and/or ion exchange columns, include all pretreatment operations and components thereof.
5. X The type, volume and/or quantity of ion exchange resin or other media must be provided. Manufacturer's specification data for all pretreatment process components (i.e. resins, membranes, etc.) must be provided for all pretreatment components utilized.
6. X A plant layout showing the pretreatment system, water using process tanks, and location of each in the facility.
7. X All sump pumps or effluent transfer stations, including size of transfer station, flow rate, and pump capacity.
8. X The wastewater sampling location.

**JRB Associates, Inc.**  
**PRETREATMENT SYSTEM PLANS (CONT.)**

9.  Views or elevations of all inlet and outlet connections on treatment tanks. This information must be provided for the internal components of pretreatment systems including but not limited to all filter and ion exchange columns in the form of cut-away views, including all distribution manifolds and resin/media heights.
10.  A Rhode Island Professional Engineer's (P.E.) stamp and signature (a xerox copy is not acceptable).

Please note, process operation and pretreatment system plans must be at least 11" x 17" and cannot exceed 36" x 24" in size.



December 10, 2013

Mr. Gabbi Bazzi  
Little Caesar's  
539 Smith Street  
Providence, RI 02908-4350

**Certified Mail**  
**Return Receipt Requested**

91 7108 2133 3937 9377 2975

Dear Mr. Bazzi:

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, which has been overdue since August 27, 2013. Notices of Violation have been issued and have been presumably ignored by your firm.

This default is in violation of both your Wastewater Discharge Permit and 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 Brian Steere at 461-8848, ext. 490. Thank you for your anticipated cooperation.

Very truly yours,

Mark Patrick McGuire, Esq.  
Associate Legal Counsel

MPM:smb

cc: Brian E. Steere