

PRETREATMENT PROGRAM
ANNUAL REPORT

JANUARY 1, 2016 - DECEMBER 31, 2016



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

<u>SECTION #</u>	<u>TITLE</u>
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***



January 4, 2016

FEE PAID STICKER LETTER 2015

Permit Number: «PERMIT_NUMBER»

Dear «TITLE» «LASTNAME»:

Enclosed please find «NUMBER» 2016 Narragansett Bay Commission (NBC) permitted Septage Hauler Identification Sticker(s). Effective January 1, 2016, 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)

February 22, 2016



ENVIRONMENTAL MERIT AWARDS

Mass Mailing - All Users - Both Districts

List Attached

Dear :

The Narragansett Bay Commission (NBC) is proud to announce its twenty-first 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 March 17, 2016 to:

Jim McCaughey, PE, BCEE
Environmental Safety Technical Assistance Manager
Narragansett Bay Commission
One Service Road
Providence, RI 02905
Email: 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 3, 2016



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 2015, 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.	Narragansett Jewelry d/b/a C&J Jewelry Company
Darlene Group, Inc.	Pawtucket Power Associates
Dominion Energy Manchester Street, Inc.	Providence Metallizing Company, Inc.
Electrolizing, Inc.	Stackbin Corporation
Godfrey & Wing, Inc. d/b/a Impco, Inc.	Tanury Industries PVD, Inc.
Hord Crystal Corporation	Technodic, Inc.
Induplate, LLC	Tiffany and Company
Interplex Engineered Products, Inc.	Truex, Inc.
John H. Collins & Sons Company	Univar USA, Inc.
Metallurgical Solutions, Inc.	

An advertisement recognizing the achievements of these companies was published in the Providence Journal on February 23, 2016. Aligned herewith 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 2015

The Narragansett Bay Commission recognizes these Significant Industrial User companies for perfect regulatory compliance with Pretreatment Program regulations during 2015:

A Harrison & Company, Inc.	Darlene Group, Inc.
Dominion Energy	Electrolizing, Inc.
Manchester Street, Inc.	Hord Crystal Corporation
Godfrey & Wing, Inc.	Induplate, LLC
dba Impco, Inc.	Interplex Engineered Products, Inc.
John H. Collins & Sons Company	Metallurgical Solutions, Inc.
Narragansett Jewelry	Pawtucket Power Associates
dba C&J Jewelry Company	Providence Metallizing Company, Inc.
Stackbin Corporation	Tanury Industries, PVD, Inc.
Technodic, Inc.	Tiffany and Company
Truex, 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.

Vincent J. Mesolella, Chairman • Raymond J. Marshall, P.E., Executive Director
One Service Road, Providence, RI 02905
401-461-8848 • www.narrabay.com

March 8, 2016



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

Dear _____ :

The R. I. DEM requires the Narragansett Bay Commission (NBC), prior to submission of its Annual Pretreatment Report, to notify all significant industrial users annually if their firm was classified as a Significant Industrial User (SIU) during that report year. Therefore, this letter is to notify you that your firm was classified as a SIU during 2015, 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 2016. If you have any questions regarding this letter or the NBC Pretreatment Program in general, feel free to contact the engineer or technician responsible for regulating your firm at 461-8848, ext. 490.

Sincerely,

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

Kerry M. Britt
Pretreatment Manager

KMB:smb

cc: Pretreatment Engineers/Technicians



March 11, 2016

2015 SNC LETTER
Sent to Leah Foster in (pdf)

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 23, 2016 as being in SNC with NBC or EPA regulations for the reporting period of October 1, 2014 through December 31, 2015. 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 April 27, 2015 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 \$200.00 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 30, 2016. (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
Jennifer J. Harrington, Esq.

March 17, 2016



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 23, 2016, the names of thirteen (13) 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. 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 2016.

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,

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

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.

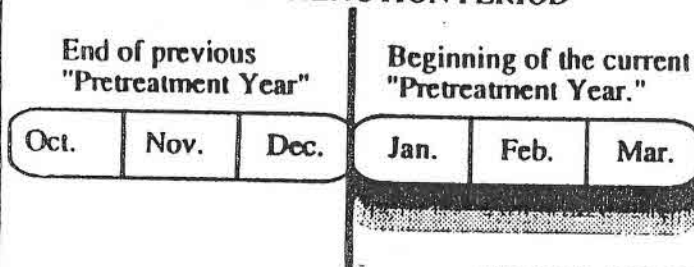
SNC Criteria H Any violation that adversely effects the operation or implementation of the pretreatment program.

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.

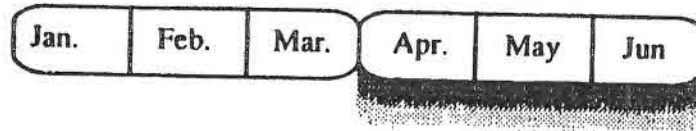
Determination of Industrial User (IU) Significant Noncompliance (SNC)

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



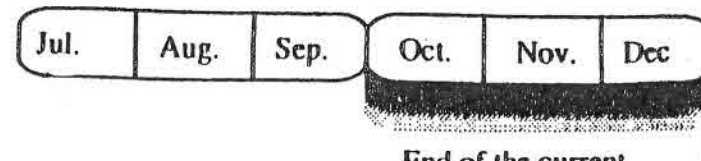
SECOND EVALUATION PERIOD



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

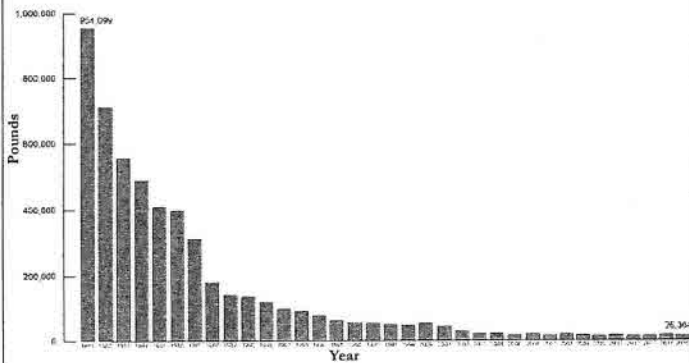


THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 C.F.R. 403.8(f) (2) (vii) and Article 10 of the Narragansett Bay Commission, Rules and Regulations require the NBC to publish annually the names of all industrial users in Significant Non-Compliance (SNC) with pretreatment standards and 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, 2014 through December 31, 2015. 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, 1981-2015



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

Most businesses located in the NBC district are to be commended for the fine job they have done treating their process discharges to remove toxic pollutants. In 1981, local industries discharged 954,099 pounds of heavy metals such as copper, nickel and zinc and 80,440 pounds of cyanide to the Field's Point Wastewater Treatment Facility. Since 1981, the total metals and cyanide loadings to the Field's Point facility have been reduced by 97.2% and 98.6% respectively. Similar toxic loading reductions have been observed at the NBC Bucklin Point facility.

Bucklin Point Service Area

Lincoln

Company Name	Violations Cited	Present Status
Denison Acquisition Company, LLC dba Denison Pharmaceuticals, LLC	TTO (1,2)	Firm is now in compliance.
Putnam Holdings, Inc. dba Terra Pack	Failure to submit reports on time (6)	Reports have been received.

Pawtucket

Bliss Manufacturing Company, Inc.	Ag (2), CN (2)	Firm is now in compliance.
Ecological Fibers, Inc.	Zn (2)	An Administrative Order was issued assessing an administrative penalty of \$22,000. Firm is now in compliance.
Mercury Print & Mail Company, Inc.	Failure to submit report on time (6)	Report has been received.
New England Linen Supply, Inc.	Failure to submit reports on time (6)	Reports have been received.
Providence Wire Creations, Inc.	Failure to submit reports on time (6)	Reports have been received.
R & D Manufacturing, Inc.	Failure to submit report on time (6)	Report has been received.

Field's Point Service Area

Johnston

Company Name	Violations Cited	Present Status
G. Tanury Plating Company	Pb (2)	Firm is now in compliance.

North Providence

DFI-EP, LLC	Ni (2), CN (2)	An Administrative Order was issued assessing an administrative penalty of \$23,500. Firm is now in compliance.
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Providence

Bella's Jewelry	Failure to submit report on time (6)	Report has not been received.
JC Gorham Co.	Failure to submit reports on time (6)	Reports have been received.
Rhode Island Recycled Metals, LLC	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. Marshall, P.E., *Executive Director*
Narragansett Bay Commission • One Service Road • Providence, RI 02905 • 401-461-8848 • TDD 401-461-6549 • FAX 401-461-6540 • <http://www.narrabay.com>
Twitter: @narrabay • Facebook: www.facebook.com/narrabay

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

June 6, 2016



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 "Kerry M. Britt".

Kerry M. Britt
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*

October 3, 2016



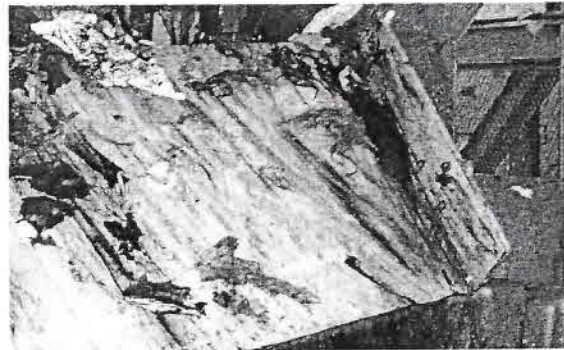
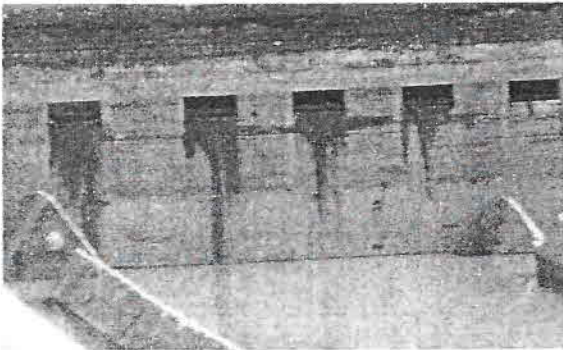
MASS MAILING

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

November 21, 2016



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

Dear «Title» «LastName»:

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:

- 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).

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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. Mesoellea, *Chairman*

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



December 28, 2016

«TITLE» «FIRSTNAME» «LASTNAME»
FEE PAID LETTER STICKER 2017


Permit Number: «PERMIT_NUMBER»

Dear «TITLE» «LASTNAME»:

Enclosed please find «NUMBER» 2017 Narragansett Bay Commission (NBC) permitted Septage Hauler Identification Sticker(s). Effective January 1, 2017, a sticker must be affixed to the inside windshield of each NBC permitted truck for identification purposes. Vehicles without a sticker will not be permitted to dump at the NBC Septage Receiving Facility.

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

Sincerely,


Sulema Martinez
Pretreatment Clerk

Enclosure(s)

***NEWSPAPER AND MAGAZINE
ARTICLES***

How Clean is Narragansett Bay?

Hundreds of millions have been spent on improvements.

BY MARY GRADY

5



PHOTOGRAPHY BY RYAN T. CONATY

At Conimicut Point Park, a (page 1 of 4) humble little patch of grass and dunes hidden behind an old Warwick neighborhood, you can stand at the very tip of a sandy point, with a beach stretching behind you to either side and the classic Conimicut Lighthouse right in the middle of the bay before you. This spot is a dividing point: To your right lies Narragansett Bay, stretching southward to Prudence Island and Jamestown, and to your left lies a strangely undefined region — labeled on most maps as the Providence River, though few call it that. This is where what many Rhode Islanders call the upper bay begins.

While the names associated with the waters north or south of Conimicut

may be vague and inconsistent, the distinction is very real. Official maps kept by the state Department of Environmental Management (DEM) draw a hard black line from the tip of Conimicut Point straight across the water to Nayatt Point, in Barrington, on the far side. All the tidal waters north of this line are marked “Shellfishing Prohibited.” This ban is in force all the time, every day, all year round, and nobody expects it to be lifted anytime soon. There’s also no swimming allowed at the beaches north of this line, so for summer visitors to Conimicut, that means you can go for a swim on the south side of the point, but not on the northern shore.

These restrictions are a lasting legacy of our industrial past, when we paved over more than half of the watershed and dumped raw sewage, industrial chemicals and trash directly into the bay. For decades, factories discharged their wastes and dyes into rivers, and suburbanites routinely dumped their used motor oil down storm drains, apparently believing the waters would magically carry it away. Until 1972, when the Clean Water Act was enacted, there were virtually no rules against all this dumping.

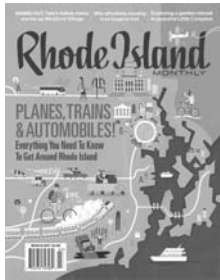
Now it’s 2016 — just forty-four years later — and if you stand on the tip of Conimicut Point, it’s hard to tell the difference between those long-polluted waters to the north and the open bay to the south. Hundreds of millions have been spent on upgrades to sewage treatment plants and stormwater systems, and factories no longer dump chemicals into the rivers. The rank and aromatic floating mats of filth that people still remember, from not that long ago, are mostly gone. The water usually looks clear and clean and even smells okay, and last summer, the upper bay’s shallow coves and crannies right up to India Point Park and even up to Waterplace teemed with schools of menhaden.

But this renaissance is still in its early stages. Change was slow for many years, and only in the last few have those residents who pay attention begun to notice a dramatic improvement in the water quality. To many Rhode Islanders, even those who live close to the coastline, the densely populated upper bay is not yet on the radar as a recreational asset for the state. That’s starting to change.



Sabin Point Park, sited at the edge of a densely settled old neighborhood, exemplifies the complex story of the upper bay. On a warm winter afternoon, the place is frequented by dog walkers, mothers with kids and older folks relaxing on the benches, soaking up the sun and the wide bay views. In the summer, the place is always busy, says Jeanne Boyle, planning director for the city. There's a popular floating dock, lots of fishing and a boat ramp. Families enjoy the playground and the sandy beach, the cool breezes and sunsets. "People really love this park," says Boyle. It's close to home and easy to get to.

But right in the middle of the sandy beach lies an aging drainage pipe, about three feet wide, carrying a persistent flow of stormwater from local streets, driveways and rooftops. The water that flows out of there is contaminated with dirt, oil, pet waste and lawn fertilizers from the neighborhoods uphill. The nutrients in this effluent feed a line of thick green algae, stretching right across the middle of the beach and out into the bay, where it attracts Canada geese and seagulls that add their own polluting waste to the waters. It's a problem, says Boyle, and it's not going to be easy to fix.



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Making sense of extra dollars in Raimondo's budget plan

Thursday

Posted Feb 4, 2016 at 11:15 PM

Savings here and there add up to nearly \$125M in additional proposed spending

By **Katherine Gregg**

Journal Political Writer

kathyprojo

PROVIDENCE, R.I. — Where on earth did Governor Raimondo's budget-writers find an extra \$124.8 million state dollars?

The simple answer: a million here, a million there. Pretty soon, they had enough money — on paper, at least — for a mini-surge in proposed state spending.

More specifically, the \$3.67-billion state-funded portion of the budget that Raimondo proposed this week relies on a projected \$118.3-million uptick in state revenue from state taxes and fees and \$47.3 million in revenue-raising initiatives, including: a proposed cigarette tax hike; the scoop of millions of dollars from the "reserves" of a number of satellite agencies, such as the Rhode Island Airport Corporation; and the sale of the state car fleet.

Raimondo also makes some assumptions: if you hire more people to go after tax evaders, the state will collect more in taxes.

Altogether, these revenue boosters add up to \$165.6 million.

But then you have to deduct the state's required annual contribution to its "rainy day" fund (\$3.8 million) and deduct another \$36.8 million — to reflect the fact that the new budget year beginning on July 1 is expected to begin with a smaller carryover surplus than this budget year. Less money at the start means less money going forward.

With these ups and downs, the state-funded portion of the \$9-billion budget grows by close to \$125 million (or 3.5 percent) to a proposed \$3,676,761,000.

The state's official revenue-estimators set the stage during the annual November conference.

After days of testimony, the top fiscal advisers to the House, the Senate and the governor arrived at a consensus estimate of how much more the state was likely to collect over the next year, as Rhode Island's economy continues to inch its way back from the recession.

The revenue-boosting moves fall into four main categories: the cigarette tax hike; a new \$150- to \$350-tagging fee for each medical-marijuana plant grown for sale to approved patients in Rhode Island; a number of one-time revenue grabs; and the assumption that hiring more people in certain corners of state government — and upping enforcement — will bring in more revenue.

The cigarette tax has gotten the most attention so far. Raimondo wants to increase the state's \$3.75-a-pack cigarette tax — the second-highest in the nation — to \$4 to raise an additional \$7.1 million and to reduce youth smoking rates. Even with the increase, the administration says, the average price of cigarettes, including sales taxes, at an overall \$9.78 per pack, will still be below Massachusetts' \$10.18.

On the one-time revenue front, she is counting on the sale of the state's passenger car fleet to raise an estimated \$1 million and raids on the "excess reserves" of five of the state's "quasi-public" agencies, including the Rhode Island Health and Educational Building Corporation (\$5 million), Rhode Island Airport Corporation (\$275,000), the Narragansett Bay Commission (\$1.45 million), Rhode Island Resource Recovery (\$1.5 million) and the Rhode Island Infrastructure Bank, formerly known as the state's clean-water agency (\$8 million).

When coupled with the \$5 million her budget team anticipates from a "fraud detection and prevention initiative," Raimondo is counting on a one-time revenue boost of \$22.5 million.

Here's what the governor's budget documents have to say about the fraud crackdown: "Currently, the state's efforts to detect and prevent fraud and abuse are spread across several agencies, including the Bureau of Audits, Office of Health and Human Services, Department of Labor & Training, Department of Business Regulation, and the Division of Taxation.

"This fragmented approach inhibits data-sharing and collaboration ... [The governor] proposes standardizing audit and quality review functions across executive branch agencies and investing \$1.5 million in a fraud detection system."

They estimate that this will save \$5 million for the last six months of this fiscal year and yield \$290,000 in personnel savings by eliminating redundant functions.

On the tax-enforcement front, Raimondo is proposing a series of moves, including the hiring of three more "revenue officers" and two more field auditors to up the state's tax collection efforts.

Beyond that, the tax division wants to hire a contractor to identify likely candidates for audits of companies that have the ability to "shift revenues between related entities to avoid taxation in certain states."

Raimondo also wants to reinstate a program called Nexus to identify and register out-of-state entities that have a physical presence in Rhode Island "but have not paid appropriate corporate, withholding, and/or sales and use taxes."

This data-mining effort, which existed in the field audit section of the Division of Taxation between 1993 and 2010, "but was discontinued due to staff turnover," is expected to capture up to \$1 million in unpaid Rhode Island taxes.

There are, of course, offsetting costs to some of Raimondo's revenue-producing moves.

For example, selling the state's passenger-car fleet will require leasing cars to replace them. Also, one-time revenue moves in 2016-17 will not help the state avert a string of projected deficits in fiscal year 2018 (\$192.6 million), FY 2019 (\$233.6 million), FY 2020 (\$271.7 million) and FY 2021 (\$332.6 million).

Overall, Raimondo is seeking to raise state and federal spending from the \$8,665,438,731 budgeted for this year to \$8,964,772,377 in the year that begins on July 1. That includes \$3.7 billion in state dollars, a 3.5 percent year-over-year increase. Most of the rest is federal funding.

kgregg@providencejournal.com

(401) 277-7078

On Twitter: [@kathyprojo](#)



TRENDING Does a Republican Candidate Have the Edge



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Secrets and Scandals: Reforming Rhode Island 1986-2006, Chapter 51

Monday, February 22, 2016

H. Philip West Jr.


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

Between 1986 and 2006, Rhode Island ran a gauntlet of scandals that exposed corruption and aroused public rage. Protesters marched on the State House. Coalitions formed to fight for systemic changes. Under intense public pressure, lawmakers enacted historic laws and allowed voters to amend defects in the state's constitution.

Since colonial times, the legislature had controlled state government. Governors were barred from making many executive appointments, and judges could never forget that on a single day in 1935 the General Assembly sacked the entire Supreme Court.

Without constitutional checks and balances, citizens suffered under single party control. Republicans ruled during the nineteenth and early twentieth centuries; Democrats held sway from the 1930s into the twenty-first century. In their eras of unchecked control, both parties became corrupt.

H Philip West's SECRETS & SCANDALS tells the inside story of events that shook Rhode Island's culture of corruption, gave birth to the nation's strongest ethics commission, and finally brought separation of powers in 2004. No single leader, no political party, no organization could have converted betrayals of public trust into historic reforms. But when citizen coalitions worked with dedicated public officials to address systemic failures, government changed.

Three times—in 2002, 2008, and 2013—Chicago's Better Government Association has scored state laws that promote integrity, accountability, and government transparency. In 50-state rankings, Rhode Island ranked second twice and first in 2013—largely because of reforms reported in SECRETS & SCANDALS.

Each week, GoLocalProv will be running a chapter from SECRETS & SCANDALS: Reforming Rhode Island, 1986-2006, which chronicles major government reforms that took place during H. Philip West's years as executive director of Common Cause of Rhode Island. The book is available from the local bookstores found [HERE](#).



Part 4

51

Reconstruction 2005–06

After their 2004 casino proposal crashed and burned, promoters tried again in 2006. West Warwick Rep. Timothy A. Williamson began quietly circulating a draft that would permit a Narragansett Tribe casino to be “privately owned.” He made no mention of Harrah’s Entertainment, which had bankrolled the 2004 effort. “Tax proceeds” would be “dedicated to property tax relief for Rhode Island citizens,” and the tax rate would be written into the Constitution: twenty-five percent of net gambling revenues would flow to the state, far short of the sixty percent Lincoln Park and Newport Grand were paying.

Williamson also proposed to “carve out” an exception from the Separation of Powers Amendment for a new seven-member gaming commission that would be controlled by legislative appointees. The speaker, Senate president, and governor would each appoint two; the attorney general would name one. The three executive branch appointees would require Senate confirmation.

Providence Journal State House bureau chief Katherine Gregg got a secret draft of Williamson’s legislation and asked several people for reactions.

Joe Larisa, who had served as executive counsel to Lincoln Almond, blasted Williamson’s plan: “Before the ink is even dry on the Separation of Powers Amendment, which was a decade-long battle to introduce good government into our three-branch system, this constitutional amendment is proposing to gut it.”

I hammered both Williamson’s attack on separation of powers and his attempt to set a tax rate in the Constitution. I pointed to the near impossibility of ever raising a tax rate once it was written into the Constitution. “I can bet you that Harrah’s will raise and spend enormous amounts of money to prevent any higher tax rate.”

Reactions were so negative that Williamson backed off. Two months later, he filed a version that would grant exclusive constitutional status to “the Narragansett Indian Tribe and its chosen partner.” This time he specified a tax rate that would start at twenty-five percent of net gaming income and rise to forty percent — still significantly less than the sixty percent Lincoln Park and Newport Grand paid. I saw only one improvement: his plan for a gambling control board with four legislative appointees had vanished.

A danger faced Rhode Island that few understood. No one knew what rules — if any — would govern campaigns for or against a casino. Two years earlier the ACLU had sued to block the Board of Elections from enforcing Rhode Island's current ballot advocacy law, which restricted the ability of organizations to advocate on ballot questions. U.S. District Judge Ernest C. Torres invited all interested parties to file *amicus curiae*, or "friend of the court," briefs.

Common Cause board member Thomas R. Bender drafted a pro bono brief. He wrote that the current ban on groups "acting in concert" had been intended to prevent corruption in candidate elections, but the Board of Elections had improperly expanded the rule to outlaw such cooperation in ballot question campaigns. Bender emphasized that political action committees with clever names — far from revealing sources of support — actually confused voters.

Former Supreme Court Justice Robert Flanders prepared a brief for the Rhode Island Foundation and United Way, attacking the state's current ballot advocacy law as "fundamentally unfair." He urged Judge Torres to declare a 1995 advisory opinion the Board of Elections had issued "unconstitutionally overbroad."

To most people ballot advocacy rules were mumbo jumbo, and few thought ahead about how to require disclosure rules. In 2005 the Board of Elections had proposed to replace its unenforceable ballot advocacy rules with a new reporting process for "ballot question advocates." House and Senate committees had held hearings but buried the legislation.

Rhode Island hurtled toward its 2006 election without any credible disclosure process for ballot advocacy. With the clock running, the Rhode Island Foundation's director of strategy, Ari A. Matusiak, invited several nonprofits that were planning ballot advocacy campaigns to address the problem. Representatives of the Rhode Island Foundation, the United Way, Rhode Island Housing, the Right To Vote Coalition, the ACLU, and Common Cause met for lunch and formed a working group. "This is tough," Matusiak said over sandwiches and coffee. "We need to untangle a real Gordian knot."

Attorney Howard A. Merten, who had filed the ACLU lawsuit, outlined a fundamental dispute: the ACLU sought to protect donors' privacy and abhorred mandatory disclosure of donors to ballot campaigns, while Common Cause feared that streams of anonymous money would influence votes on constitutional amendments or bond issues. Steve Brown and I both believed the current ballot advocacy law was unconstitutional, but our groups differed sharply about how to fix it.

The impasse lasted several weeks, until Michael V. Milito, an attorney for Rhode Island Housing, came to a meeting with a list of possible compromises. He used memos prepared by the ACLU and Common Cause to chart alternative ways to amend the unsuccessful 2005 ballot advocacy legislation. The most difficult issue involved thresholds for donor disclosure. Where current law required that campaigns disclose contributors who gave over \$100 in a calendar year to any candidate, Milito suggested \$1,000-per-year for ballot question donors.

Brown and I struggled over the details but tested Milito's compromises with our organizations. National ACLU and Common Cause leaders fired back withering criticism, but our state boards recognized the necessity of a middle path. The working group welcomed the proposed compromises, as did the Board of Elections. House and Senate sponsors introduced the new ballot advocacy legislation in mid-February 2006.

Maureen Maigret ushered me into her office, a windowless room crammed with papers and books. It had a high ceiling but only three walls: one sidewall followed the curve of the Senate chamber wall above. As policy director for Lt. Gov. Charles J. Fogarty — whose only official duty was to step in if the governor were incapacitated — Maigret had no official power. In the last year of his second four-year term, Fogarty had nowhere to go but up or out. Pundits saw him as the Democrat most likely to oust first-term Republican Gov. Don Carcieri, but most predicted a tough slog.

A savvy political operator, Maigret had served as a state representative from Warwick in the 1970s and 1980s, as Gov. Bruce Sundlun's Director of Elderly Affairs in the early 1990s, and since 1998 on the staff of Lt. Gov. Fogarty — first as director of communications and then policy chief. "We've been drafting some reform legislation," she said in a clipped Rhode Island accent. "We'd like your suggestions to make it the best it can be." She slid a draft across her desk. "Charlie's committed. He'll do all he can to make this become law."

Its title held promise: "The Public Accountability and Reform Act of 2006." Maigret worked at her computer while I paged through her draft, which included proposals to close loopholes in campaign finance, ethics, and lobbying laws. Several concepts were drawn from Common Cause bills that had died many times in House and Senate committees. One particularly pleased me: since the Ethics Commission's meltdown in 2001, we lobbied without success for a law that would bar business associates of registered lobbyists from serving on the commission. I told her I liked it.

"We thought you would."

Other sections would improve ethics education, strengthen financial disclosure, and increase possible criminal penalties for ethics violations. Fogarty's legislation created an extraordinary opportunity to enact genuine reforms. Democrats who ran the General Assembly despised Carcieri and might swallow this bitter medicine to help Fogarty win. Common Cause could not support Fogarty's bid for governor, but we could play the role of honest broker on this legislation.

Nearly everyone liked Fogarty and called him "Charlie." The scion of a revered Irish-American political dynasty, his father had been in the state Senate before him, and his brother Paul currently served three northwest corner towns. His uncle John E. Fogarty had spent twenty-six years in the U.S. Congress, where he championed medical research and led in creating the National Institutes of Health.

In several subsequent meetings, Maigret and I polished the bill and identified sponsors. House Majority Whip Peter Kilmartin and Sen. Mike Lenihan introduced identical versions of the legislation during the third week of February. At a press conference in the House Lounge, Fogarty described the cynicism many people felt toward public officials and declared it urgent that we "restore confidence in government."

Maigret had asked me to stand with Fogarty, Lenihan, and Kilmartin, as the lieutenant governor outlined his proposals for increasing transparency and accountability. The bill would broaden disclosure requirements under the State Vendor Disclosure program, which had been enacted after the RISDIC collapse. That law required

contractors and vendors to file with their bids a list of their campaign contributions to statewide general officers. Fogarty's bill would also require them to list contributions to members of the General Assembly. Another section would require lobbyists to report their campaign contributions as lobbying expenses. The legislation would require secretaries of state to monitor lobbyist reports and to publish annual reports on their expenses, gifts, and campaign contributions. These reporting requirements would bring to light details that often fell through the cracks.

The bill would make relatives or law partners of lobbyists ineligible for appointment to the Ethics Commission, and anyone with an ownership interest or job in a lobbying business would also be barred. One section would require every "major state decision-maker" to participate in ethics training within six months of being sworn in, appointed, or hired. That requirement would take away the excuse of not knowing.

Finally, Fogarty's legislation would require state general officers to disclose more details of their income. Categories of disclosure would follow those for members of Congress:

Less than \$1,000

greater than \$1,000 but no more than \$10,000

greater than \$10,000 but no more than \$25,000

greater than \$25,000 but no more than \$50,000

greater than \$50,000 but no more than \$100,000

greater than \$100,000 but no more than \$200,000

greater than \$200,000 but no more than \$500,000

greater than \$500,000 but no more than \$1,000,000.

During the press conference, a reporter asked whether my standing beside Fogarty constituted an endorsement. I answered that it did not. I said Common Cause never endorsed candidates for public office, but this was important legislation that deserved universal support.

The prime sponsor in the House, Majority Whip Peter Kilmartin, would work to deliver the necessary votes. His sponsorship alone would help move the bill, and he clearly intended to burnish Fogarty's reform credentials.

I was disappointed when Kilmartin also filed a one-page bill to revoke the power of Carcieri or any future governor to place an advisory question on the ballot.

On the House floor, before the gavel, I asked him why.

"Fool me once," Kilmartin said, "shame on you. Fool me twice, shame on me. Fool me three times?" He rolled his eyes.

Almond had put separation of powers advisory questions on the ballot in 2000 and 2002, and huge majorities of voters approved. House leaders had clearly decided to take a political hit to prevent any future gubernatorial advisory questions.

Five years had passed since Common Cause had gone silent on voter initiative, but backers of the process were not happy. Bob Flanders, who now served on our board, had become chairperson of the Voter Initiative Alliance. He and Operation Clean Government vice-chair Beverly Clay asked to address the board and seek its renewed support.

Kevin McAllister had led the next phase agenda committee that studied our history and recommended staying silent on the issue. Now McAllister's committee offered a formal resolution opposing voter initiative. Board members listened to both sides and discussed the arguments. Over several hours, four of the committee's "whereas" clauses gained traction:

WHEREAS experience has shown there is no practical or effective way to limit, control or otherwise regulate expenditures either for or against initiative campaigns;

WHEREAS voter initiative has been used to undermine the rights and aspirations of minorities, and we believe no proposal for voter initiative can be crafted to protect against this possibility;

WHEREAS voter initiatives tend to offer short-term, simplistic solutions to complex problems;

WHEREAS no matter how carefully drafted and how sincere the motivations of its adherents, the various forms of voter initiative nevertheless contradict the fundamental American political system that was designed to temper the excesses of popular majorities. . . .

These and other WHEREAS clauses gave rise to a resolution:

THEREFORE, BE IT RESOLVED that although voter initiative can provide a mechanism for reform and bring about change in the status quo, the Common Cause Rhode Island State Governing Board believes that on balance, the pitfalls of voter initiative outweigh the benefits, and Common Cause Rhode Island opposes changes to the Rhode Island Constitution that would authorize a form of voter initiative.

After years of supporting what political scientists called direct democracy, the state board — for the first time — reversed its previous position on an issue.

On March 28, 2006, the House Judiciary Committee took up four pieces of voter initiative legislation, which Gov. Carcieri and House Republicans were making their cause célèbre. Rep. Nick Gorham, a stalwart ally in the campaign for separation of powers, sponsored the constitutional resolution and testified passionately.

I had signed in to oppose voter initiative for the first time. Committee Chair Donald J. Lally called me immediately after Gorham. I passed out copies of the board's resolution. "As some of you know," I reminded the committee, "I

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4 Baths

4988 sqft

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\$1,399,000

4 Beds

3 Baths

4250 sqft

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helped write this legislation. For years, I came before you on behalf of Common Cause to testify in support of the very bills that we oppose today." I explained why we were reversing our policy on a major issue: "In a whole series of states where voter initiative exists, majorities of voters have crushed affirmative action and gay rights. We in Common Cause have reached the painful conclusion that nothing we can draft will prevent similar abuses from happening here."

Bob Flanders testified after me that the clause we had drafted to prevent initiatives from abridging civil rights was clear and would be upheld in court. Witnesses who followed him differed sharply on the Common Cause reversal. Former critics praised us, while old allies in the Voter Initiative Alliance heaped blame. My face burned. I kept reminding myself of our motto: "No permanent friends, no permanent enemies."

Testimony continued until after 11:30 that night. As the tumult ended I had little doubt that voter initiative would die again in 2006. I left the hearing room feeling older, wiser, and humbled. I had carried out the will of the Common Cause state board, and years of experience had convinced me that this well-intentioned Progressive-era reform had outlived its usefulness.

Democrats had more than enough votes to pass Peter Kilmartin's bill revoking the governor's power to place advisory questions on the ballot. Kilmartin assured his colleagues on the House Separation of Powers Committee that the current law was "a clear-cut issue of the executive branch exercising legislative powers in violation of separation of powers."

The governor's deputy chief of staff, Jeffrey Grybowski, disagreed. "The placement of a question on the ballot is not a legislative power," he insisted. "The governor's placing of a nonbinding question on a ballot is not making law."

When my turn came, I testified that the public interest required some way to pose questions in areas where the legislature stonewalled challenges to its power. State voters had approved Almond's 2000 separation of powers question by a 2 to 1 majority, and his 2002 question by more than 3 to 1. I said measurable expressions of the public will had prompted legislative action. Without voter initiative, Rhode Island should keep the governor's advisory question process.

Kilmartin swatted that argument away with an email from the National Conference of State Legislatures. A researcher wrote that she did not know any other state that allowed the governor to place questions on the ballot. The committee quickly recommended passage.

On the very day the House was to debate Kilmartin's bill, Carcieri upstaged legislators and raised the stakes by announcing that he had ordered two advisory questions onto the November ballot. The first would ask whether voters wanted a constitutional amendment to establish voter initiative; the second would ask about limiting increases in state spending and property taxes.

From the House floor Kilmartin fired a salvo at Carcieri. "It's very clever of him to propose two sexy political questions for the ballot," Kilmartin declared. "He's trying to legislate on the ballot." By a vote of 50-17 the House rescinded the governor's power. A week later the Senate followed suit, 23-7.

Carcieri vetoed Kilmartin's bill and scoffed at the charge that an advisory question intruded on the legislative process. "That claim is false," Carcieri wrote. "Non-binding questions do not enact laws; they merely permit the governor to ask about matters of public concern" and allow voters to respond.

Although both chambers easily overrode Carcieri's veto, the drama continued. Kilmartin's revocation bill included a standard clause that made it effective "upon passage," but six weeks had elapsed since Carcieri formally directed Secretary of State Matthew Brown to place his two nonbinding advisory questions on the November ballot. Brown petitioned the Superior Court for a declaratory judgment: should he follow Carcieri's order to place those two questions on the November ballot? Or did the veto override block him from following the order?

Lawyers for the legislature and governor filed briefs in Superior Court. Carcieri noted that nothing in the act suggested that it could be applied retroactively. The General Assembly argued that because the ballot had not been certified, the power had not yet been exercised. Where would the courts come down?

As spring brightened Rhode Island, Rep. Elaine Coderre led her committee in systematically restructuring boards and commissions to comply with the Separation of Powers Amendment. With counsel Michael R. Egan at her elbow, Coderre grappled with thirty-six boards, ranging from the Agricultural Lands Preservation Commission to the Retirement Board and State Traffic Commission. Employees, lobbyists, and activists trooped to the State House to seek special treatment. Coderre and her committee listened patiently, addressed technical issues, and coordinated their drafts with Senate leaders. Consistent with the amendment, they added Senate confirmation for members of three administrative bodies where legislators had never served.

But House leaders resisted reconfiguring three major boards — the Coastal Resources Management Council (CRMC), the Narragansett Bay Commission, (NBC), and the I-195 Redevelopment Commission.

Since 1995 Common Cause had targeted legislators and legislative appointees on the CRMC and NBC. The I-195 board, created in 2002, had been House Speaker John Harwood's last such achievement before scandal toppled him. Its structure followed the traditional template: public members appointed by the speaker, Senate majority leader, and governor. The mayor of Providence would also name two, and the Providence Foundation, a business group, would get one. The question remained whether House leaders would finally agree to end legislative appointments on these three powerful public boards.

On March 27, two Senate committees gathered in the Senate Lounge for a joint hearing on the CRMC. Sen. Susan Sosnowski chaired the Environment and Agriculture Committee, and Sen. Mike Lenihan led the Government Oversight Committee. Since CRMC's creation in 1971, legislative leaders had appointed eight of the board's seventeen members. When voters approved the amendment, Sosnowski resigned from her seat, and the other legislators followed. But four public members appointed by legislative leaders continued to serve. Early in 2005, Gov. Carcieri had named new members to fill the eight seats held by legislators and legislative appointees, but the Senate never held hearings to confirm or reject them.

Witnesses before the joint Senate hearing described the CRMC's history and mission. But conflict flared over its duties. Were its powers legislative or executive?

Lawyer-lobbyist Robert D. Goldberg offered explosive testimony. He announced that the state Supreme Court had ruled in *Westerly v. Bradley* the previous summer — seven months after voters approved the amendment — that control of the coastline still belonged to the legislature. He read a key sentence from the decision: “Under the public trust doctrine, the General Assembly is vested with the authority and responsibility for regulating and preserving tidal lands and may determine appropriate uses for tidal land, grant tidal land to another, or delegate the authority to regulate that land on the state’s behalf.”

Goldberg looked triumphantly at the senators around a circular glass-topped table. “That is as clear as it gets in the law,” he declaimed. “This is a clear definition from the Supreme Court — after all those amendments became law. The courts still recognized and declared that this is a legislative function.”

I assumed that Goldberg’s wife, Justice Maureen McKenna Goldberg, had debriefed her role in this unanimous decision with him.

Later, when I looked up the decision, I saw that *Westerly* had prosecuted a man for swimming in the Weekapaug Breachway, a channel where swift tidal currents raced between the Atlantic Ocean and Winnapaug Pond. The swimmer challenged the town’s jurisdiction, but the high court supported *Westerly*’s authority with a rhetorical flourish: “This ordinance is related directly to preserving the public peace, safety, comfort and welfare and is authorized by the town charter. Accordingly, the defendant’s contention that *Westerly* has no authority to prohibit swimming in the breachway is waterlogged.”

Bob Goldberg’s testimony was waterlogged, too. The Supreme Court’s decision had focused on a *Westerly* ordinance. The swimmer had appeared pro se, without a lawyer. No one argued about or even mentioned the 2004 Separation of Powers Amendment.

Earlier in the joint committee hearing, I had reminded the two committees that Rhode Island’s new appointments clause was adapted directly from Article II, Section 2 of the U.S. Constitution, which empowered the president to name all federal officials who execute federal laws. That became the template for Rhode Island’s Article IX, Section 5. “The test here,” I told the senators, “is not whether a board or commission may exercise legislative or even judicial power. The test is whether a public or quasi-public board ‘exercises executive power under the laws of the state.’ If it does, then the governor needs to appoint the members, subject to the advice and consent of the Senate.”

Andrew Hodgkin, Carcier’s executive counsel, followed me. He testified that the Coastal Council exercised executive powers whenever it issued permits, enforced laws, conducted hearings, promulgated regulations, or managed programs. Then he explained that its authority had rested on the “broad powers” clause, which had given the General Assembly unique powers until voters repealed it. “I think,” Hodgkin said, “residual powers stood for the proposition that the executive only had those powers the General Assembly saw fit to designate to the executive. That’s no longer the law in Rhode Island.”

The next morning, Providence Journal reporter Peter Lord framed the CRMC question in the context of Goldberg’s tenacious drive to win approval for Champlin’s Marina to occupy much of Block Island’s Great Salt Pond. Lord reminded readers that political, economic and environmental interests were intense along Rhode Island’s priceless coastline. “But now,” he wrote, “political control of the one small state agency that regulates almost every waterfront activity has become extremely uncertain.” He described “a growing sense in the General Assembly that maybe it should retain control of the CRMC and not turn it over to the governor.”

Robert Goldberg had gotten the last word with his comments about the Weekapaug Breachway case. So how widely had he peddled his line that — even after the Separation of Powers Amendment — the Supreme Court had reaffirmed legislative control of the coastline? How many who heard his spiel had bothered to read the decision?

Construction crews had begun building a new intersection between I-95 and I-195. The “lway,” as it was called, featured a 400-foot bridge with three graceful parallel arches. Vehicles still rumbled along the old roadway, over crumbling bridges buttressed with timber and iron, but bulldozers would soon start to clear the original right-of-way and open up more than thirty-five acres of prime land.

House leaders were in no hurry to relinquish their control over platting and leasing the new land. Already, Johnson & Wales University officials had made a formal presentation to the powerful I-195 Redevelopment Board. The school’s senior vice president and its architect — ironically, accompanied by lobbyist Robert Goldberg — had made the presentation. They described “a campus-like group of buildings” with amenities including retail space.

In February 2006, the leadership team of Speaker William Murphy filed I-195 legislation that purported to address separation of powers problems. The bill would transfer “state-owned property” to the I-195 board “for sale, lease or utilization pursuant to a public-private partnership, when the highway use shall be discontinued.” Yet despite authorizing major executive duties, the legislation made no change in the membership of the nine-member board. Legislative leaders would still control four of nine members, and they would provide meeting space. Furthermore, instead of sending their new I-195 bill to the Separation of Powers Committee, House leaders referred it to the Finance Committee, which scheduled a hearing for April 24.

In response to an email alert, separation of powers advocates barraged members of the Finance Committee with emails and phone calls. I arrived at the committee’s basement hearing room prepared to argue that they must reconfigure the I-195 Redevelopment Board to comply with the 2004 Separation of Powers Amendment. Without explanation, the committee crossed the I-195 legislation off its agenda.

I later saw Providence Mayor David Cicilline entering an elevator and slipped in behind him. I knew he was unhappy about our declaration that the governor must appoint all members of the I-195 Redevelopment Board. We stepped out of the elevator in the sub-basement, both aware that we needed to talk privately.

Lobbyists and legislators flowed out of the elevators and down a low passageway toward an exit. Cicilline and I hung back in an alcove between enameled white brick pyramids that spread the weight of the dome. Both of us understood that without agreement on mayoral appointments, the I-195 legislation might be shelved. The mayor said he was troubled that Common Cause was opposing his appointments to the I-195 board.

"Why exclude mayors?" Cicilline demanded. "I agree that there should be no legislative appointments. I supported separation of powers when very few others in this building would. I was one of your earliest sponsors."

"You were courageous," I agreed, "and they punished you for that."

"I'm in an executive position now," Cicilline insisted. "I should be able to make appointments that affect my city."

"I'm sorry," I said. "No one meant to exclude you. The bipartisan drafting team overlooked the question of mayoral appointments. The best we can do now is to write into law that the governor must 'give due consideration' to your recommendations."

Cicilline shook it off. "We need to fix the appointments clause."

"Too late," I said. "I told you that we missed it. But you missed it, too. All through the spring of 2003 you were mayor, and there were lots of hearings, but no one from your office testified that the amendment should be revised to allow mayors to make appointments to boards like this."

Cicilline and I walked in silence toward the exit. Outside, in April sunshine, his official car and driver were waiting. He climbed in. We had not resolved the impasse or even agreed what came next.

As his black car with the license plate "City 1" rolled out of the legislators' parking lot I pondered his political rise during twelve years since he told me he intended to run for a seat in the House. He had worked hard on ethics legislation and introduced the first resolution to put a separation of powers amendment on the ballot. Through all the defeats and setbacks, the amendment had only grown stronger. Now that it was implanted in the Constitution, he felt whipsawed by an unintended consequence, while I felt great urgency to implement the amendment, not change it.

House leaders seemed equally determined to keep the Narragansett Bay Commission beyond the governor's grasp and under local control. Elaine Coderre had introduced legislation that recast the state's sewage treatment agency as a "regional commission" rather than a state agency. She proposed to cut the board from twenty-three members to nine. No longer would the speaker and Senate president name two members each, nor would the governor appoint ten public members. Instead, the mayor of Providence would pick two members of the board and the chief executives of Central Falls, Cumberland, East Providence, Johnston, North Providence, and Pawtucket would each choose one.

Throughout the spring, Save the Bay, the Conservation Law Foundation, the Environment Council, and Common Cause all lobbied Coderre and her committee against this plan "to regionalize" the commission. Since 1970, Save the Bay had been fighting pollution in Narragansett Bay and its watershed, attacking the flood of industrial wastes and raw sewage that poured into the estuary and its tributary rivers. Bumper stickers on countless cars carried the organization's three-word name and message in white letters against a bold red background — SAVE THE BAY. Save the Bay delivered data to policy-makers, conducted education programs for children, backed bond issues for sewage treatment facilities, managed annual swims across the bay, and had filed a lawsuit that prompted creation of the Narragansett Bay Commission in 1980.

Save the Bay lobbyist Jane Kenny Austin pressed the case that the NBC had a statewide mission. She wrote to policy-makers that the NBC board, "should continue to reflect a cross section of Rhode Island citizens," not merely sewage-producing cities. Downstate communities also had a large stake in the health of Narragansett Bay. Furthermore, the Bay Commission's plants in Providence and East Providence treated thirty-two billion gallons of wastewater each year. She wrote: "As the largest discharger into the Bay, the performance of NBC is of critical interest to all of Rhode Island." Furthermore, its Combined Sewer Overflow project — a system of tanks and tunnels being blasted out hundreds of feet below ground — was the largest public works project in Rhode Island's history and was funded with state bonds. Austin argued that the commission affected the entire state, and its integrity depended on a broadly representative statewide board.

The House Separation of Powers Committee listened to unanimous testimony from environmental and reform organizations against regionalizing the Narragansett Bay Commission, but on June 14, it recommended Coderre's bill to the full House.

A week later Gov. Carcieri trumpeted the alarm at a State Room press conference, where Cynthia Giles, director of the Conservation Law Foundation in Rhode Island, stressed the absurdity of regionalizing. "The sewage pipes of the Narragansett Bay Commission may not cover the entire state, but its decisions certainly do," Giles declared in a voice that would have filled the room without a microphone. "If the health of Narragansett Bay isn't a matter of statewide interest, it's hard to imagine what is."

Carcieri emphasized the sewage agency's statewide financing. Rhode Island was still paying off \$33 million in outstanding bonds, and debt service alone for the fiscal year beginning July 1 would be \$1.5 million. I argued that the bill relied on "sheer revisionist fantasy," as if twenty-five years of the commission's history as a state board could be compressed into a regional project. "Leaders of the House," I said, "seem determined to try an end-run around the Separation of Powers Amendment."

Rep. Jim Davey announced that he would propose an amendment on the House floor to reconstitute the Bay Commission with twelve members. Nine would come from the communities whose residents paid sewage bills, and three at-large from the rest of the state. Mayors of rate-paying communities would present lists; the governor would give "due consideration" and make the appointments; the Senate would confirm members of the new board.

On April 25, U.S. District Court Judge Ernest Torres cited three U.S. Supreme Court decisions — which he labeled Buckley, Bellotti, and Berkeley — as he struck down key elements of Rhode Island's Ballot Advocacy Law. He overturned the law's ban on corporate contributions to ballot question campaigns, its limit on the amounts individuals or corporations could contribute to ballot campaigns, and its prohibition against groups "acting in concert" or coordinating expenditures on ballot campaigns. Torres barred the Board of Elections from enforcing those sections of the law. But he also affirmed the state's interest in requiring disclosure of contributions:

Unlike expenditures, which pass directly from the party making them to the vendor of the goods or services being purchased, a contribution may pass through many hands before being expended for its ultimate purpose.

Consequently, unless contributions are reported at each step along the way, the true source of the funds may be concealed from public view.

Two days after the Torres decision, I bumped into Christopher Boyle at the State House's main security checkpoint. The son of a federal judge, Boyle had been House majority whip when I first met him. After he decided not to run for re-election in 1992, we served together on the Blue Ribbon Commission on the Future of the General Assembly. Like numerous other legislators from the 1980s, he had caught the wave of generous legislative pensions and returned to the State House as a lobbyist representing Newport Grand, one of two vast video slot parlors in Rhode Island. Both were fighting to block casino bills that would open their market to Harrah's Entertainment or Trump Casinos.

Although the courts had knocked the 2004 Harrah's casino amendment off the ballot, the enabling statute remained in state law. Its special rules for gambling referenda were fraught with problems but remained in full force.

As often happened at the State House, all sides referred to the section simply by its number in the Rhode Island General Laws: 17-25.1. Newport Grand and Lincoln Park needed to rescind the statute, and Boyle said they wanted the repeal inserted into our ballot advocacy legislation.

Civil War cannons on either side of the high marble vestibule pointed toward the center where Boyle and I stood. I feared that our delicately balanced ballot advocacy legislation would get shredded in the crossfire between the gambling behemoths. Although the House Judiciary Committee had already approved our legislation, Boyle had been lobbying the House and Senate sponsors to add the repeal of 17-25.1 as a floor amendment. During two weeks when our bill should have been debated and passed, it had been postponed a half-dozen times to the next day's House calendar. I asked Boyle if he had anything to do with the delays.

He shrugged in a knowing way. "Don't you think any rewrite of the ballot advocacy section also needs to repeal the section on gambling referenda?"

"It's a separate section of law, Chris. We think any repeal should go forward as a separate bill."

"Why not as part of your legislation?" Boyle demanded.

"Because some of the organizations in our working group can't take positions on gambling referenda." I explained that the ballot advocacy coalition — which now included the Rhode Island Foundation, Rhode Island Housing, United Way, University of Rhode Island, Family Life Center, ACLU, and Common Cause — had resolved difficult issues in our legislation, which was poised to become 17-25.2. Most of our nonprofit institutions had no reason or authority to take positions on gambling referenda in a separate section of state law.

"You mean Common Cause doesn't care about the rules for gambling referenda?"

"Of course, Common Cause cares," I said. "But we're part of a coalition that can't jump into your fight over casino gambling." I suggested that he call Ari Matusiak at the Rhode Island Foundation or leaders of the other groups I had mentioned.

As we parted, he leaned close and whispered that the only way 17-25.1 could be repealed was with passage of 17-25.2. "And, without the repeal of 17-25.1 your bill won't become law."

I emailed the ballot advocacy coalition about the impromptu conversation, including Boyle's threat. Reminding them that he had served as majority whip and knew the game, I warned them to expect his call.

Two weeks later, Boyle distributed a five-page memo to the entire General Assembly. "Common Cause and the Rhode Island ACLU," he wrote, "have turned a blind eye to the implications of not addressing gambling referenda and have, therefore, served up legislation that contains cherry-picked reform." With bold caps and multiple exclamation points, he wrote: "PENALTIES — The penalty for failure to register with the government? A person who fails to comply with Chapter 25.1 is guilty of a FELONY!!! (17-25.1-2)."

His final section began with a rhetorical question in bold type: Why had Common Cause and the ACLU "fought full ballot question reform?" Boyle added that his organization, the Rhode Island Hospitality and Tourism Association, was "deeply disappointed in the 'ostrich-like' approach of Common Cause and the ACLU." He made no mention of the charities, foundation, housing agency, and university that he knew also comprised the working group.

Boyle's attack on the ACLU and Common Cause also ignored the fact that he and his clients had not bothered to express their concerns in response to Judge Torres's request for amicus briefs. Nor had he testified on the ballot advocacy legislation during a Senate Judiciary Committee hearing the day after Torres ruled. Nonetheless, in the weeks that followed it became clear that Boyle and his backers had enough clout to sabotage our bill.

Meanwhile, Harrah's lobbyist Terrence M. Fracassa — although at odds with Boyle on casino questions — also pushed to insert the repeal of 17-25.1 into the ballot advocacy bill. Boyle and Fracassa forced a new round of negotiations, this time over whether Boyle's Rhode Island clients could agree with Fracassa's Las Vegas employers on rules to govern campaigns for or against a Rhode Island casino. As chair of the Senate Judiciary Committee and prime sponsor of ballot advocacy legislation, Sen. Michael J. McCaffrey brought all the parties into his corner office on the third floor to thrash out our differences. As was his style, McCaffrey directed us to find a solution we could all live with and come back to him.

On the House side, leaders had placed all the responsibility for sponsoring the election agency's legislation on freshman Rep. Edwin R. Pacheco. Pacheco was smart and eager to resolve problems. Though he had neither portfolio nor office, he had met with the working group to probe our disagreements and press for solutions.

Several weeks of tense negotiations produced a new "gambling referenda" section that required disclosure by contributors of who gave \$1,800 or more to advocate on gambling in any two-year election cycle. Reports were to reveal whether the contributor had "any direct or indirect affiliation" with any promoter of gambling "in any jurisdiction and, if so, the name of such facility or entity." The new text deleted the dysfunctional portion of 17-25.1 and piggybacked the revised section onto our newly drafted 17-25.2, entitled the "Ballot Question Advocacy and Reporting Act."

The final substitute versions of 17-25.2 accomplished what our working group intended. It removed sections of the current law that Judge Torres had ruled unconstitutional, defined "ballot question advocate" as anyone who spends

\$1,000 or more in a calendar year to advocate on a particular ballot question, and created rigorous disclosure requirements for ballot advocates, whether individuals, nonprofit groups or corporations. It also outlawed contributions under false names "or in any manner for the purpose of disguising the true origin of the contribution."

The substitute bill prohibited the formation or use of legal entities to advocate for or against a ballot question that would disguise the "true origin of the funds" or evade the reporting requirements.

Finally, it empowered the Board of Elections to enforce the new law and established penalties for violators up to triple the dollar amount of contributions or expenditures made in violation of the law or not reported.

With these compromises, those who had been working for many months hoped for smooth passage through the Senate and House. The Senate passed McCaffrey's substitute version at the end of May with a unanimous vote, but House debate turned raucous. I watched from a gallery above, as Minority Leader Robert A. Watson moved to recommit Pacheco's bill to committee and thereby kill it. His Republican caucus and dissident Democrats had apparently decided to defy the leadership over this bill. The House rejected Watson's move to recommit, 33–17.

Rep. Rene R. Menard then offered two amendments that would have affected candidate elections but not ballot advocacy. Like Watson's motion to recommit the entire package, Menard seemed intent on scoring political points. Pacheco debated, and a majority crushed Menard's amendments in successive votes.

Pacheco's bill passed with a final vote of 63–1 and flew to the Senate, where it won unanimous approval and went to Gov. Carcieri, who signed both Pacheco's House version and McCaffrey's Senate twin into law on July 3.

Rhode Island's new Ballot Advocacy Law provided no dramatic advance, but it did create enforceable rules for the fall's ballot questions. Nonprofits could campaign without fear of breaking the law, and voters would at least know who paid for the casino ads.

Broad-shouldered, tall, and tenacious, Narragansett Chief Sachem Matthew Thomas had spent the spring of 2006 promoting the casino. He reminded lawmakers that governments — federal, state, and local — had often betrayed his people. A 1996 amendment to the federal Indian Gaming Regulatory Act had thwarted the tribe's plan to build a casino on its 1,800-acre reservation in Charlestown. It left the Narragansetts as the only federally-recognized tribe barred by U.S. law from operating a casino on their tribal land.

In 2003, frustrated tribal leaders had begun selling cigarettes at a tax-free shop on tribal land. Their business grew until Gov. Carcieri ordered the operation closed down. State troopers came in force, and members of the tribe fought back. The raid brought injuries, arrests, and humiliation that evoked bitter memories from Rhode Island's history. Those disappointments propelled the Narragansetts toward their partnership with Harrah's Entertainment and the 2004 West Warwick casino proposal, which the General Assembly approved but the Rhode Island Supreme Court disqualified.

Again in May 2006, Matthew Thomas and top Harrah's officials made the tribe's case before the House Finance Committee. The constitutional amendment under consideration, a newly revised version of Timothy Williamson's legislation, stated that the casino would be privately owned and operated by a new corporation established under Rhode Island law by "the Narragansett Indian Tribe and its chosen partner." The revised amendment no longer mandated a gaming commission with legislative appointees or specified a tax rate. The resolution required it to appear on the ballot as the first referendum question and as a result, would bump our Voting Rights Amendment to second place.

The Finance Committee recommended Williamson's legislation to the full House, but Thomas told reporters it was only "round one." He added that the years had taught him "never to count any chickens before they hatch in Rhode Island." The governor blasted Finance Committee members for casting "a momentous vote on a bill they had seen only moments before." He added: "Voting to approve this amendment without that critical information was breathtakingly irresponsible and could put the state at great financial risk."

During House debate two days later, Nick Gorham pushed an amendment to bar legislators and general officers from receiving "any remuneration" from business interests related to the casino during their terms in public office and for five years afterward. Although this might have kept lawmakers out of commercial gambling, red lights swamped green on the board, defeating Gorham's amendment 44–25.

Steven R. Ucci of Johnston then moved to delete specific references to West Warwick and the Narragansett Tribe. He proposed new constitutional language to permit a single resort casino whose operator would be "selected by a competitive process" and "subject to regulation and taxation by the State of Rhode Island." Ucci's motion forced the House to vote up or down on competitive bidding, which a House study panel had recommended three years earlier, but that motion was crushed.

Rep. James F. Davey then proposed to change the requirement that the casino amendment become "the first referendum question," ahead of the Voting Rights Amendment. Davey's proposal went down by a vote of 46–23. The vote counts established a pattern, and the final vote for passage tallied 44–28.

During Senate debate on June 1, Sen. Joseph M. Polisena of Johnston offered the same competitive bidding amendment, which was narrowly rejected, and final passage in the Senate came by a vote of 23–13.

Williamson's strange casino package went to the ballot as Question 1. How much would Harrah's spend to win? Would a promise of constitutionally mandated property-tax relief sway voters, or would the empathy many felt for the Narragansetts translate into pro-casino votes?

Though the Right To Vote Amendment was on the November ballot — now as Question 2 — the campaign still needed action on Joe Almeida's Restoration of Voting Rights Act, which would enable the Department of Corrections, secretary of state, and other agencies to begin registering former prisoners after state voters approved the constitutional amendment. Despite continuous lobbying, Almeida's legislation seemed stuck in the House Judiciary Committee. Our Right To Vote Coalition, now comprising more than fifty groups, again deluged lawmakers with calls to pass the legislation.

Almeida's bill finally popped up on the House Judiciary Committee's agenda for June 20, and the committee approved it with little discussion. Two days later, the full House passed it, 64–6. Senators had approved identical

legislation a year earlier and quickly did so now. Gov. Carcieri, who had never supported the idea of restoring the vote for prisoners, allowed it to become law without his signature.

Now that we had run our legislative gauntlet — getting the amendment onto the ballot, enacting a workable ballot advocacy law, and finally passing the enabling statute — a huge question remained. Could we persuade Rhode Island voters to restore the vote for ex-convicts that many feared and shunned?

Diana Kelly had been associate director at Common Cause for more than two years. But administrative duties consumed her time. On June 23, probably the last day of the 2006 session, she went with me to the State House for the first time.

We found the broad brick and marble plaza outside the main entrance mobbed. Hundreds of staff members, lobbyists, legislators, and reporters spilled quickly into broiling sunshine. The brick sidewalks on both sides of Smith Street filled up with clusters of people. Police cars blocked the cobblestone drive, and sirens wailed.

A bomb threat had been phoned in. It might be a hoax or real, and the entire State House was being evacuated. Senate Majority Leader Teresa Paiva Weed stood on the north side of Smith Street in a blazing salmon-colored dress. Near her, a senator in a bright red shirt with white suspenders had left his jacket inside. Stan Israel, the lightly bearded head of SEIU Local 1199, sported a ponytail, sunglasses, and a Panama hat. As cell phones and cigarettes sprouted in the crowd, a black-suited SWAT team raced toward the entrance with automatic weapons. K-9 units appeared, and handlers rushed their dogs toward the huge oak doors.

As the bomb search stretched to a half-hour, black SUVs loaded up and left for Patrick's Pub, a political watering hole a few blocks west of I-95. Those of us who stayed found shade under trees outside the Department of Administration.

I used the time to lobby senators for a piece of crucial legislation that was not scheduled for a vote: Lt. Gov. Charlie Fogarty's Public Accountability and Reform Act of 2006. The House had passed Kilmartin's slightly amended version a week earlier and sent it to the Senate. Now it was stuck in the Senate Judiciary Committee with Mike Lenihan's companion bill, which had been held for further study two months earlier. Had I been wrong in thinking Democrats would pass it to boost Fogarty's chances of becoming governor?

"I'll bring it up with leadership," Lenihan told me. He had been out sick but returned on this chaotic last day. Several other senators were not aware that Fogarty's legislation had disappeared and promised to ask Judiciary Chairman Mike McCaffrey.

When police declared the State House safe, a tide of agitated people flowed back in, slowed by a bottleneck through security.

"So you're retiring?" A legislative staff member appeared at my side. "Have they got a replacement?"

"Not yet," I said. "The search committee was reviewing résumés this morning."

"So what's the pay?" he asked, openly interested.

I brushed off the question.

"Above fifty thousand?" he persisted.

"Yes," I said, "but that would depend on skills and experience."

After he left, Kelly said she would not have given him any figure.

I asked what she would have told him.

She chuckled. "I would have said: 'If that's your first question, this is not the job for you.' "

I was relieved when Senate Judiciary met in haste and recommended Fogarty's bill for passage. The final version would allow citizens to see more clearly than ever before the flow of funds from special interests to public officials. It would require general officers and candidates for the five statewide offices to start disclosing their outside income in nine brackets — less than \$1,000, between \$1,000 and \$10,000, between \$10,000 and \$25,000, and so on, as members of Congress were required to do. The legislation would also bar appointment to the Ethics Commission of anyone who worked for or had any ownership interest in businesses that derived income from lobbying.

Both the House and Senate versions went to the Senate floor and passed with unanimous 35–0 votes. When the Senate version flew back to the House for final passage, representatives approved it 59–6. I reminded myself to congratulate Fogarty and his policy director, Maureen Mairret, for delivering a package of substantial reforms.

The 2006 session ended with a bang and a whimper over separation of powers. For reasons only they knew, House leaders moved to recommit Coderre's bill for a regional Narragansett Bay Commission to her committee. The House Finance Committee never recommended any action on the I-195 Relocation Commission. Without action, those two powerful boards and the Coastal Resources Management Council would still not comply with the Separation of Powers Amendment.

House leaders waited until the maelstrom of the last hours to launch a stealth attack. On May 31, Coderre had quietly filed a bill that proposed to delete the entire existing law on the CRMC and then reenact it, word for word, under a slightly changed chapter number in the Rhode Island General Laws. Instead of appearing as 46-23, it would become 46-23.3. Coderre's committee never conducted a hearing on her reenactment, and I thought it had died.

Then, on the final day of the session, Coderre filed a resolution asking the Rhode Island Supreme Court for a written advisory opinion, citing her strange CRMC repeal and replacement bill. Her committee met without notice and sent the advisory opinion request to the floor "with a recommendation of passage."

Coderre's resolution asked the justices to answer four distinct questions: Would the proposed reenactment with legislators listed for appointment to the CRMC violate the "so-called Separation of Powers Amendment?" Could the speaker of the House appoint members of the CRMC? Was the "so-called Separation of Powers Amendment" self-

executing or did it require legislative implementation? And was the CRMC "by its nature, purpose, and operation" a legislative body?

These questions were disturbing — as if there had been no decade-long debate, and as if a huge percentage of state voters had not already approved the amendment. After three years of claiming they supported separation of powers, House leaders brought the reactionary resolution to the floor after midnight on the last day of the session. Although exhausted and dazed, representatives engaged in a perfunctory debate and then approved Coderre's request for an advisory.

The night air smelled of rain when I left the State House for the last time as lobbyist for Common Cause. I had hoped to retire with the separation of powers struggle settled, but fierce resistance remained. Instead of obeying the plain language of the amendment, House leaders were clearly launching a new battle. Had they believed John Tarantino's memo? Bob Goldberg's testimony? Would the Supreme Court trample our carefully crafted amendment? How much would this new legal battle cost? Could it be resolved in only five months before my retirement?

For Phil West's Bio, [Click here](#)

Related Slideshow: Rhode Island's History of Political Corruption



Buddy Cianci

Vincent A. "Buddy" Cianci resigned as Providence Mayor in 1984 after pleading nolo contendere to charges of assaulting a Bristol man with a lit cigarette, ashtray, and fireplace log. Cianci believed the man to be involved in an affair with his wife.

Cianci did not serve time in prison, but received a 5-year suspended sentence. He was replaced by Joseph R. Paolino, Jr. in a special election.



R.I. House panel weighs regulation of growing drone industry

Thursday

Posted Feb 25, 2016 at 11:15 PM

By Patrick Anderson

Journal Staff Writer

patrickanderso_

PROVIDENCE, R.I. — As the number of unmanned aircraft, or drones, in the skies has climbed over the past year, so have calls for Rhode Island to regulate the devices to protect public safety and preserve personal privacy.

Drone advocates say that would be a mistake that could cripple a growing industry and put the state at an economic disadvantage.

Both sides of the debate spoke out Thursday at the final hearing of a House commission studying drone policy.

"I hope Rhode Island will take the chance to embrace this technology, allow it to flourish and allow high-tech jobs to flourish in the state," said Andy Trench, founder of XactSense, a Warwick company that makes drone equipment. "This will be the dawn of the commercial [Unmanned Aerial Vehicle] era. Over-regulating before knowing the full potential would be a huge mistake."

On the other side, Joanne Maceroni, government affairs manager of the Narragansett Bay Commission, the quasi-state water treatment agency, urged lawmakers to prohibit drone use near any wastewater treatment facility in the state.

Drones flying over treatment plants could pose a "confidentiality" risk, Maceroni said, and allow "sabotage" through materials dropped into treatment tanks. She said the agency was also worried about drones colliding with the commission's three large wind turbines at the Field's Point plant in Providence.

Stephen Rosario, senior director at the American Chemistry Council, a chemical manufacturing trade group, said drones presented a "safety concern" to the industry. He didn't go into specifics on what language he would like in a drone bill, but said he had provided it to lawmakers.

Hillary Davis of the American Civil Liberties Union of Rhode Island said her organization was seeking limits on law enforcement use of drones, including an all-out ban on "weaponized drones."

Given all those concerns, what might a Rhode Island drone law eventually look like?

Commission chairman Stephen Ucci, D-Johnston, said he intends to file a bill later this session that would address at least four different issues: cleaning up existing state aviation regulations for unmanned aircraft, protecting personal privacy, improving drone safety and creating special penalties for malicious drone use.

The primary regulator of aviation, manned and unmanned, in the country is the Federal Aviation Administration and some drone enthusiasts have questioned whether states have the authority to limit drone use.

Ucci said he believes Rhode Island can't prohibit flight, set altitude restrictions or create its own drone registry, but could limit certain behavior involving drones, such as trespassing, and could require users to seek permission before flying near certain places.

Rep. Raymond Gallison, D-Bristol, filed a drone regulation bill earlier this month that would, among other things, require people to register their drones with the state and prohibit drone use near any airport, military installation, government building, school, college or university. A similar bill filed last year was not passed.

A House Judiciary Committee hearing on the Gallison bill scheduled for Wednesday was postponed on Gallison's request, said Larry Berman, spokesman for Speaker Nicholas Mattiello.

Meanwhile, a deadline for recreational drone users to register their devices with the FAA passed earlier this week and agency spokesman Jim Peters said 368,472 drones were registered nationwide.

The FAA does not break out drone registrations by geographical area, Peters said, so it is unknown how many of those are operating in Rhode Island.

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Narragansett Bay Commission To Open New Lab Facility At Field's Point

By [AMBAR ESPINOZA](#) • MAR 9, 2016



Scientists at the Narragansett Bay Commission are getting a new building at the Field's Point campus. That's where the wastewater agency will house labs with the latest technology.

Spokeswoman Jamie Samons said Narragansett Bay Commission scientists have always worked with expensive equipment to monitor and analyze water quality. But they've worked in small, cramped labs. The new spacious

building scheduled to open this spring will include top-of-the-line technology that detects pollutants at finer resolutions.

“In some cases, it will save our ratepayers some money because we’ll be able to see exactly what level any pollutants are at, rather than assuming,” said Samons.

That level of detection will guide – more precisely – the amount of chemicals the treatment plant uses to treat water.

“It lets us see at a much more granular level what’s happening in the water,” said Samons. “We can look at not only our own water samples, but also water samples from the industries that we regulate.”

The EPA’s top water official Joel Beauvais visited the Field’s Point facility this week. Samons said Beauvais was checking out the building that will house the new labs.

The wastewater agency will hold a ribbon-cutting ceremony for the new building in June.



Citizens Financial Group to Build a Corporate Campus for 3,200 Colleagues in Johnston, RI

New campus to be a cost-effective replacement for Cranston, RI service and support facility

Citizens headquarters to remain in Providence

March 09, 2016 10:45 AM Eastern Standard Time

PROVIDENCE, R.I.--([BUSINESS WIRE](#))--Citizens Financial Group (NYSE: CFG or "Citizens") today announced plans to build a new corporate campus in Johnston, RI. The new campus will bring together more than 3,200 colleagues, primarily from a Cranston location with a lease set to expire in 2018. The Citizens headquarters will remain in Providence.

The new Citizens Bank campus will be located on a currently undeveloped parcel of land on the west side of Interstate 295 in Johnston. The design unveiled today includes approximately 420,000 square feet of office and meeting space including a call center and executive offices. It will feature dining, fitness and retail facilities for colleagues and fields and trails that will be available for use by the local community.

"As we continue to work towards our goal of making Citizens Bank one of the top-performing regional banks in the country, we are very excited today to announce Johnston, Rhode Island as the future home of a new Citizens campus," said Bruce Van Saun, Chairman and CEO. "This is a great site that will allow us to cost effectively build a campus with modern amenities to suit our needs. We are grateful for the collaboration we have received from state and local officials leading up to this decision and we look forward to breaking ground later this year."

The Citizens campus is made possible in part by infrastructure improvements like the extension of sewer lines into the area by the Narragansett Bay Commission. The project also will include the construction of a new exit for Interstate 295, the estimated cost of which will be split by the Rhode Island Department of Transportation and Citizens. A 20-year property tax agreement is pending approval from the Johnston Town Council.

"I couldn't be more proud that Citizens is choosing to stay true to its roots by building a remarkable corporate campus here in Johnston while maintaining its headquarters in downtown Providence," said Governor Gina M. Raimondo. "This project will bring much-needed construction jobs to our state in the short term as well as significant long-term economic activity that will contribute to Rhode Island's comeback."

"Today's announcement marks a major milestone in the history of Johnston," Johnston Mayor Joseph Polisena said. "The new Citizens campus will deliver an immediate boost to our tax base, and I fully expect that other businesses will want to come to Johnston to serve the more than 3,000 Citizens colleagues who will be here every day, creating

additional jobs and tax revenue. Local residents and developers who want to build in this area also will benefit from the coming infrastructure improvements. This is a big win for Johnston. I am very proud that Citizens has chosen our town for a project of this size, and I look forward to the Citizens Bank family becoming part of our Johnston family.”

Construction is expected to commence later this year, with occupancy projected for late 2018.

About Citizens Financial Group, Inc.

Citizens Financial Group, Inc. is one of the nation’s oldest and largest financial institutions, with \$138.2 billion in assets as of December 31, 2015. Headquartered in Providence, Rhode Island, Citizens offers a broad range of retail and commercial banking products and services to individuals, small businesses, middle-market companies, large corporations and institutions. In Consumer Banking, Citizens helps its retail customers “bank better” with mobile and online banking and the convenience of approximately 3,200 ATMs and approximately 1,200 Citizens Bank branches in 11 states in the New England, Mid-Atlantic and Midwest regions. Citizens also provides mortgage lending, auto lending, student lending and commercial banking services in select markets nationwide. In Commercial Banking, Citizens offers corporate, institutional and not-for-profit clients a full range of wholesale banking products and services including lending and deposits, capital markets, treasury services, foreign exchange and interest hedging, leasing and asset finance, specialty finance and trade finance. Citizens operates through its subsidiaries Citizens Bank, N.A. and Citizens Bank of Pennsylvania as Citizens Bank, Citizens Commercial Banking and Citizens One. Additional information about Citizens and its full line of products and services can be found at www.citizensbank.com.

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Citizens Bank Unveils Plans For New Corporate Campus In Johnston

By IAN DONNIS · MAR 9, 2016

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Citizens Bank CEO Bruce Van Saun looks on as Governor Raimondo discusses the bank's planned Johnston campus

CREDIT IAN DONNIS / RIPR

Citizens Bank announced plans Wednesday to build a new 420,000-square foot corporate campus on an undeveloped parcel on the west side of I-295 in Johnston, to absorb more than 3,200 employees from current office sites in Cranston, East Providence, Warwick and Smithfield.

"We had an exhaustive search of all the potential options, and we thought this was best for us, for our needs," Citizens CEO Bruce Van Saun told RIPR after a news conference at the Johnston Senior Center.

Most of the workers will come from a Cranston office for which the lease expires in 2018. The bank plans to keep its headquarters at a downtown Providence building.

Governor Gina Raimondo hailed Citizens' decision to build in Johnston as a vote of confidence in Rhode Island. She was joined by Johnston Mayor Joseph Polisena and a host of other elected officials in praising the announcement.

"It shows us that Citizens is recommitting itself to Rhode Island and expanding and choosing to put a beautiful new campus in Johnston," Raimondo said.

Van Saun declined to specify why Citizens ruled out the vacant so-called Superman Building in downtown Providence as a new location for bank employees, although sources said the bank seriously considered it. "I'd prefer not to go into the criteria that we chose," Van Saun said. "I just think that based on the kind of people that we have that are currently located in a suburban location this works out best for us."

Groundbreaking on the new campus is expected to happen this year, ahead of its opening in 2018.

About five thousand of Citizens' 18,000-person workforce is based in Rhode Island. Raimondo said Citizens is the 13th-largest bank in the US.

Asked if there was a serious possibility that Citizens might leave Rhode Island, Van Saun said, "We didn't really look at other alternatives. We're very satisfied with the quality of workforce we have here and the ability to work with the people in the state to make sure that they're investing in the needs for the future. You may have seen the governor just announced on Monday a new investment in technology in the schools, which also, I think, positions the state to continue to suit us for the long term."

Citizens said the future campus is made possible by infrastructure improvements such as the extension of sewer lines into the area of the site. The project calls for the construction of a new exit on I-295, the cost of which will be divided by Citizens and the state Department of Transportation. The plan also involves a 20-year property tax agreement that faces approval by the Johnston Town Council.

The Johnston location will include a call center, executive offices, a cafeteria and a fitness center, as well as recreational facilities like trails and ball fields open to non-employees. Van Saun said it will allow Citizens to serve its customers more efficiently, and that workers will be able to work more collaboratively.

Citizens was spun off by the Royal Bank of Scotland in 2015 and is now an independent entity.

On the Superman Building, Raimondo said her administration continues to work with Providence Mayor Jorge Elorza to try to revive the building.

This post has been updated.

First on 10: Citizens Bank to consolidate offices, build a new facility in Johnston

by PATRICIA RESENDE, NBC 10 NEWS
Wednesday, March 9th 2016

Citizens Bank to consolidate offices, build a new facility in Johnston. (WJAR)

CRANSTON, R.I. — Citizens Financial Group Inc. (NYSE: CFG), which has approximately 1,200 Citizens Bank branches and 3,200 ATMs in 11 states in the New England, MidAtlantic and Midwest regions, plans to break ground on a new facility in Johnston, R.I., NBC 10 News has learned.

The new 420,000-square-foot facility, which will be built on a currently undeveloped piece of land on the west side of Interstate 295 off of Greenville Avenue behind the Greater Rhode Island Baptist Temple, will be the new home to 3,200 employees from the company's Cranston, Smithfield, Warwick and East Providence locations and is slated to open in 2018.

A new exit for Interstate 295 will have to be constructed and costs for that exit will be split by the company and the Rhode Island Department of Transportation, according to the company. Plans for a new campus was made possible (in part) because of sewer line extension into the area by the Narragansett Bay Commission, according to the company. A 20-year property tax agreement, however, is still pending approval from the Johnston Town Council.

Included in the plans for the new campus, which will house office and meeting space, a call center and executive offices, is dining, fitness and retail facilities for colleagues and fields and trails that will be available for use by the local community, according to the company.

While the plan is to leave Cranston because its lease will expire in 2018, Citizens has made it clear that it plans to keep its roots in Providence and keep its headquarters at the Cap Center.

"We are confident that building a new campus from the ground up rather than staying in Cranston or relocating to another existing facility will lead to greater collaboration for our colleagues and a better work environment overall," CEO Bruce Van Saun told employees, while also encouraging them to provide input throughout the process.

One of the oldest financial institutions, Citizens posted \$138.2 billion in assets as of Dec. 31, 2015.

Stay tuned to Turnto10.com for more details as they become available.

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Citizens Bank plans to build Johnston campus

Mayor praises project as 'game changer'; new 295 ramp in works, tax agreement heads to Town Council



(/uploads/original/1457566063_8fc2.jpg)

WELCOME TO TOWN: Mayor Joseph Polisena gestures while speaking during Wednesday's press conference. Seated at left is Citizens Chairman and CEO Bruce Van Saun.

SUN RISE PHOTO



Posted Wednesday, March 9, 2016 10:31 am

By **Tim Forsberg**

Citizens Bank plans to consolidate several Rhode Island offices at a multi-million dollar campus in Johnston, officials announced Wednesday, with the new facility's opening slated for 2018.

During a press conference at the Johnston Senior Center, representatives of the bank, town, and state revealed designs for the campus to be built on the west side of Route 295, near the Greater Rhode Island Baptist Temple on Greenville Avenue. Officials did not disclose the project's specific price tag.

"I'm pleased to announce that later this year we will break ground on a new, 420,000-square-foot corporate campus right here in Johnston," said Bruce Van Saun, Citizens chairman and CEO.

"The doors will open on the new campus in 2018. It will house more than 3,200 colleagues who serve a wide range of activities," he added. "It will include a call center, operations and technology group, and various corporate functions. The Johnston campus will be just off I-295, very convenient to One Citizens Plaza [in Providence], which will remain our headquarters building, and it's also very convenient for many of our colleagues who live up and down the I-95 corridor."

Citizens has a long history in Rhode Island, dating back to the founding of High Street Bank in 1828, which went on to establish Citizens Savings Bank in 1871. In November 2015, Citizens Financial Group became an independent, publicly traded company, separating from its parent company, the Royal Bank of Scotland, to become a top-performing regional bank.

With \$138.2 billion in assets as of Dec. 31, 2015, the bank has 17,700 employees, 3,200 ATMs, and approximately 1,200 branches in 11 states in the New England and the Mid-Atlantic and Midwest regions. Citizens offers mortgage lending, auto lending, student lending and commercial banking services.

"With the Citizens Bank project coming to Johnston, it becomes a real game changer for our town," Mayor Joseph Polisena said. "I, along with the Johnston Town Council and state delegation, worked very hard to ensure that this much sought after project will land in [Johnston]. Citizens is our latest new company to invest their dollars and their future in our great town."

"We set our foundation here in Rhode Island, we've launched what has become one of the nation's largest commercial and retail banks out of Rhode Island, and we service, in some way or another, almost five million of our customer base right here in Rhode Island," Van Saun said. "We're also honored to employ more than 5,000 of our almost 18,000 employees in Rhode Island, and all of those colleagues are deeply committed to taking care of all those that we serve. So all in all, I'd say that Citizens and Rhode Island combination has been mutually beneficial. Therefore, it's only natural that we want to recommit to Rhode Island and all that it has to offer."

Van Saun provided a background on Citizens' decision to move to Johnston in an effort to highlight the benefits that the new campus will provide his company, clients, and the community. Stating that Citizens' lease for its large facility on Sockanosset Cross Road in Cranston is set to expire in 2018, the company explored options, from staying in Cranston and moving to another building to building their own, new facility.

"As we moved through the decision making process, we had great input from many local leaders and business partners," Van Saun said. "In the end, it became increasingly clear that the best option was to build a campus that suits all of our needs, that suits our culture, is very cost effective, and puts us in a better position to establish Citizens as a top performing regional bank over the long term."

Citizens associates who currently work at the Cranston facility will move to the new campus upon completion, as will certain groups who now work in East Providence, Jefferson Boulevard in Warwick, and at the bank's Smithfield location. Citizens' Providence location will remain as its headquarters, although some teams currently located there will also move to the Johnston campus.

"It's a great day for Rhode Island and it's a great day for Citizens," Gov. Gina Raimondo said. "Thank you to Citizens for doubling down on Rhode Island and choosing Johnston as a place for what will be such a magnificent facility. This was a team effort we all had to pull together here – the company, the town, the state, private developers, coming together to get something great done. Today we're celebrating a real Rhode Island success story. Citizens belongs in Rhode Island. Citizens is part of who we are, it's a great brand. I couldn't be more grateful and proud that you've chosen to continue to invest in Rhode Island."

Van Saun said the move will allow the company to serve customers more efficiently, as the planned technology and infrastructure installations will be state of the art, and the new facility's space will allow employees to work more collaboratively.

"The colleagues themselves are going to really like the features. We're in the early stages of planning, but we're confident there will be a wide range of appealing amenities—a fitness center, a central cafeteria, flexible work spaces, green space and lots more," Van Saun said.

Plans for construction of a new exit off of Route 295 are progressing, with expenses being shared between the Rhode Island Department of Transportation and Citizens.

"This is a great company, and with great leadership by the governor and leadership by the town to use the economic tools just to bring everything together," state Rep. Stephen Ucci said. "The concept of building these ramps, getting it done in order to take that land locked piece of property and give it such a high use to the town is a testament of what happens when people work together."

The new facility will also come with outdoor recreational areas that will be open to the public.

"Our commitment to the community will shine through as well. In addition to the economic benefits, we plan to include trails and ball fields that will be open to the citizens of Rhode Island. We'll also take advantage of new building practices to make the campus energy efficient. The building will help us increase productivity while minimizing additional run rate costs, with benefits to our shareholders and everyone we serve," Van Saun said.

The projected improvements are seen as adding economic value for Johnston's residents.

"This new facility will be state of the art, with millions invested in our town along with the infrastructure improvements that will benefit all of the residents in that area, not to mention that property values will increase," Polisena said. "Construction of this huge endeavor will bring hundreds of construction jobs to our state and to our town, and will allow for improvements of our state roads and highways. We will continue to be known nationwide as Johnston being the best place to live, work and play."

Other local leaders echoed the mayor's sentiment.

"We are thrilled with this announcement," U.S. Rep. Jim Langevin said. "Citizens clearly isn't just a business in Rhode Island, they're part of our fabric here, they're part of our community. We're just so thrilled that Citizens has doubled down and further invested its presence here in our state, both for the jobs that will remain here and the great things that they will do in our community."

The Citizens campus was made possible in part by infrastructure improvements, such as the extension of sewer lines into the area by the Narragansett Bay Commission. A 20-year property tax agreement is pending approval from the Town Council.

"This is a good day for Johnston. We have this incredible, nationwide company that wants to locate a significant portion of their business here in town, and obviously we want to be sure it's done properly," said Town Council President Robert Russo, who represents the district where construction will take place. "They are going through different scenarios, and we want to be sure that the planning is done properly and has the least disturbance on the residents. Hopefully the town will benefit economically with jobs and economic development in the surrounding areas."

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Citizens Bank to build large corporate campus in Johnston

Wednesday

Posted Mar 9, 2016 at 10:37 PM

Updated Mar 9, 2016 at 10:37 PM

Company leaves Cranston; 3,200 R.I. workers to be
relocated in new complex

By

Journal Staff Writer

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JOHNSTON — Citizens Financial Group plans to build a 420,000-square-foot corporate campus on 108 wooded acres in Johnston, where it will relocate 3,200 bank employees from other Rhode Island facilities by 2018.

The company will retain its corporate headquarters in downtown Providence, Chairman and CEO Bruce Van Saun announced Wednesday.

Although the company conducted an "exhaustive search" in recent months and considered renovating, finding existing office space or building new, Van Saun said Citizens never really considered leaving Rhode Island. The bank is committed to keeping more than 5,000 of its 18,000 employees here, he said.

With the bank's lease at 100 Sockanosset Cross Rd., Cranston, due to expire in 2018, several communities have worked to convince Citizens that they were the right place for the bank. Van Saun declined to delve into details about criteria the company considered or to respond to reporters' questions about why the bank ruled out the vacant "Superman" building in Providence.

"Based upon the kind of people we have in the suburban locations, this works out best for us," Van Saun said.

About 2,500 Cranston employees will relocate to Johnston. The bank will also move some employees from its headquarters and Warwick, East Providence and other locations, Van Saun said.

The new campus will be just west of Route 295, off Greenville Avenue in northern Johnston near the Smithfield line and the Greater Rhode Island Baptist Temple.

Van Saun declined to discuss construction costs, but the project will receive some financial help from the government:

n A 20-year tax-stabilization agreement from Johnston, although Mayor Joseph Polisena and Van Saun declined to discuss details. Polisena said the City Council is supportive and will consider the deal within months;

n Citizens and the Rhode Island Department of Transportation have agreed to split the \$6-million cost to build new exit and entrance ramps onto Route 295, between current exits 6 and 7, where the highway crosses Greenville Avenue. The DOT will pay \$3 million, and construction is expected to start in the spring of 2017, DOT spokesman Charles St. Martin said;

n The Narragansett Bay Commission will pay to extend its sewer line that now runs underneath Hartford Avenue near Salina Avenue, spokeswoman Jamie Samons said. Costs haven't been determined, but design work will begin almost immediately and the project will probably go out for bid next fall or winter, she said.

Van Saun said building a new facility rather than renovating means Citizens will get "more for our money" because it will own a modern, energy-efficient facility that meets all its needs.

The bank did not seek and is not getting any new economic incentives created by Governor Raimondo's administration, Van Saun and Commerce Secretary Stefan Pryor said.

"We could make the economics work without them, and I think there's potentially a bit of a backlash when people see that take place," Van Saun said.

Johnston is the clear winner as Citizens negotiates to buy the undeveloped property from David Corsetti. Polisena said this new construction adds to over \$1 billion in construction and investment in Johnston since he took office eight years ago.

Cranston, however, loses one of its 10 biggest employers. Although Mayor Allan Fung told The Providence Journal in December that he was working hard to keep Citizens, he declined requests for an interview Wednesday. Fung's director of administration, Robert Coupe, said the news was "unfortunate," but not a surprise.

Citizens was receptive to Cranston's efforts, Coupe said, but they had very specific requirements, including a large swath of land and easy highway access. "Unfortunately, I think we just didn't have the space that they were looking for," he said.

The parent company of Citizens Bank, Citizens Financial Group, had \$138.2 billion in assets as of Dec. 31, 2015. The bank traces its history to the 1828 founding in Providence of High Street Bank. Citizens went public in September 2014 as its once-parent company, Royal Bank of Scotland, divested its holdings in the U.S. bank.

Governor Raimondo joined Van Saun and about 200 business, political and nonprofit leaders Wednesday for Citizens' announcement at the Johnston Senior Center.

"Citizens belongs in Rhode Island," Raimondo told the

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Citizens Bank Announces New Corporate Campus in Johnston

Thursday, March 10, 2016

GoLocalProv News Team

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Citizens Bank announced Wednesday that it plans to build a new corporate campus in Johnston, which will bring over more than 3,200 employees primarily from the current Cranston location, whose lease is set to expire in 2018.

The new Citizens Bank campus will be located on a currently undeveloped parcel of land on the west side of Interstate 295 in Johnston. It will include 420,000 square feet of office and meeting space including a call center and executive offices.

Citizens announced the facility will feature dining, fitness and retail facilities for employees and fields and trails that will be available for use by the local community.

The Citizens headquarters will remain in Providence.

Citizens, Leaders on the Record

"As we continue to work towards our goal of making Citizens Bank one of the top-performing regional banks in the country, we are very excited today to announce Johnston, Rhode Island as the future home of a new Citizens campus," said Bruce Van Saun, Citizens Chairman and CEO. "This is a great site that will allow us to cost effectively build a campus with modern amenities to suit our needs. We are grateful for the collaboration we have received from state and local officials leading up to this decision and we look forward to breaking ground later this year."

The Citizens campus is made possible in part by infrastructure improvements like the extension of sewer lines into the area by the Narragansett Bay Commission. The project also will include the construction of a new exit for Interstate 295, the estimated cost of which will be split by the Rhode Island Department of Transportation and Citizens. A 20-year property tax agreement is pending approval from the Johnston Town Council.

"I couldn't be more proud that Citizens is choosing to stay true to its roots by building a remarkable corporate campus here in Johnston while maintaining its headquarters in downtown Providence," said Governor Gina M. Raimondo. "This project will bring much-needed construction jobs to our state in the short term as well as significant long-term economic activity that will contribute to Rhode Island's comeback."

"Today's announcement marks a major milestone in the history of Johnston," Johnston Mayor Joseph Polisena said. "The new Citizens campus will deliver an immediate boost to our tax base, and I fully expect that other businesses will want to come to Johnston to serve the more than 3,000 Citizens colleagues who will be here every day, creating additional jobs and tax revenue. Local residents and developers who want to build in this area also will benefit from the coming infrastructure improvements. This is a big win for Johnston. I am very proud that Citizens has chosen our town for a project of this size, and I look forward to the Citizens Bank family becoming part of our Johnston family."

Construction is expected to commence later this year, with occupancy projected for late 2018.



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Mulch mob to continue bike path improvements

Posted Thursday, July 21, 2016 2:29 pm

Volunteers will join River Rangers from the Woonasquatucket River Watershed Council (WRWC) this evening to continue annual spruce ups and improvements to the Woonasquatucket Bike Path through Johnston.

Rangers and volunteers will be mulch mobbing and working on plantings around the bike path entry near the Hillside and Greenville avenues area next to Scramblers. They will be at work July 21 from 4 p.m. to 7 p.m. A volunteer cookout will top off the evening's efforts.

This work follows up on other projects the WRWC has been working on with the Johnston community to continue making the bike path a clean, safe and beautiful amenity for the town. Last fall and this spring, WRWC began a project working with a bike path neighbor to test screening methods using fencing and plantings. Volunteer groups contributed time, effort and funding to help with this initial project just north of Lee Street along the path.

Earlier this summer, WRWC also began installing improved bike path signage at the Lyman Avenue gateway. These improvements were installed in partnership with the town of Johnston Department of Public Works in response to citizen input.

The mulch event is part of WRWC's Clean Days on the Greenway Series, which is sponsored by Channel 10, Cardi's Furniture & Mattress, Brown Superfund, BankRI, United Way of Rhode Island, Cox, Contech, Lopco Contracting, Narragansett Bay Commission, and Fuss & O'Neill.

For more information, visit wrwc.org.

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Artificial Reefs Installed Along Providence Waterfront

July 27, 2016



Shellfish reefs have been installed along the shoreline of India Point Park. The nine reefs are only visible at low tide. (RISD photos)

By KEVIN PROFT/ecoRI News staff

PROVIDENCE — On the morning of Saturday, June 18, visitors to India Point Park witnessed something unusual. This tranquil park, at the confluence of the Providence and Seekonk rivers, normally attracts walkers, joggers, sunbathers, fishermen, and yoga and tai chi practitioners. But, on this day, there were also people splashing in the river.

With the tide low, the water didn't reach much higher than their knees. They placed sculptural forms, about 3 feet in diameter and made of metal frames and concrete plates, among the wooden pilings just beyond the seawall. Parkgoers curious enough to ask, learned they were watching the deployment of nine artificial shellfish reefs — the culmination of nearly four years of collaborative research and planning among many of the state's public and private universities.

The installation couldn't have gone smoother, according to Emily Vogler, a landscape architecture professor at the Rhode Island School of Design and one of the project's leaders. Timed for the four-hour window surrounding low tide, the team finished securing the reefs just before the water got too deep to work in.

Now all they can do is wait and see if oysters and other shellfish actually settle on the structures. Because upper Narragansett Bay is closed to shellfishing, the plates couldn't be seeded with larvae prior to deployment. Instead, shellfish larvae will need to find their way to the reefs naturally.

The city's waterfront supported millions of oysters at the turn of the 20th century, with 5,000 acres of leased oyster beds in the Providence River and upper bay in 1905. In the decades that followed, pollution, bacteria and sedimentation caused a sharp decline in the oyster population. The Hurricane of 1938 put an end to the already-declining local oyster industry, and shellfishing was later banned in the upper bay because of polluted sediment and bacteria in the water.

Today, the oyster population along Providence's shoreline is counted in the thousands, not millions. In 2008, when the first phase of the Narragansett Bay Commission's combined sewer overflow project was completed and began reducing pollutants and untreated sewage entering the upper bay, the oyster population began to rebound in the Providence and Seekonk rivers.

Despite cleaner water, sedimentation still limits the oyster population's recovery; oyster larvae latch onto rocky substrate, which has been coated or buried by sediment resulting from ecologically unsound land management and erosion upstream. It's this issue that the artificial reef project — dubbed SHELL-ter — hopes to address.

Vogler is fairly confident that shellfish larvae will settle and grow on the reefs' concrete plates. Much of the research leading up to the reef deployment concentrated on creating plates that maximize settlement. Prototypes, varying in texture and concrete composition, were tested in tanks and open water at Roger Williams University in Bristol. Some plates were also tested at Bold Point Park, just across the river from India Point Park.

The ecological benefits of oysters are numerous. A single adult oyster can filter up to 50 gallons of water daily, removing nutrients and improving water quality. Oyster reefs, which develop as new oysters grow on older or dead oysters, act as coastal buffers, reducing wave action and erosion during storms and creating conditions that allow marsh habitat to expand.

As sea levels rise and more frequent storms hammer the coast, oyster reefs offer a natural infrastructure solution to help keep the coastline intact. Additionally, reefs act as prime habitat for other



marine life such as crabs and juvenile finfish.

Three distinct reef types were deployed and depth was varied to experiment with which combinations are most successful.

Health concerns about people harvesting and eating oysters off the artificial reefs have been raised, according to Scheri Fultineer, department head of Landscape Architecture at RISD.

“Siting the reefs so people can see, but not get to them is important,” she said. The goal of the project is environmental restoration, not growing culinary oysters, she added.

Friends of India Point Park (FIPP), initially concerned by the scale and location of the project, is now enthusiastic about hosting the reefs. A main objective of FIPP is to limit the impact of the built environment on the park. FIPP and the project's leaders were able to come to a compromise that shifted the location of the deployment and scaled back the number of forms that would be placed in the water.

Marjorie Powning, co-chair of FIPP, said she hopes the reefs draw more attention to the historic seawall and wooden pilings along the shore of the park; the seawall is “in trouble,” she said, and in need of restoration.

The reefs are permitted to remain in the water for three years. Vogler is currently working on a long-term monitoring plan with Marta Gomez-Chiarri, department chair of fisheries, animal and veterinary sciences at the University of Rhode Island. Three distinct reef types were deployed, all at different depths, so data will be collected on which types and depths provide the best results.

Middle-school and high-school science classes will be involved in the monitoring effort, according to Vogler.

Monitoring days will be opportunities to educate the public about the reefs, Vogler said. While FIPP doesn't permit signage in the park due to the high volume of requests it receives, information about the reefs will be made available at the

community bulletin board near the playground, and possibly in the parking areas and at entrances to the park, according to Powning. Vogler also is interested in having examples of each reef type installed at Kennedy Plaza as a sculptural art installation that would attract more attention to the project.

After three years, the reefs will be removed from the water and studied so improvements and modifications can be made to future reefs. Vogler said she would like a future deployment to study the coastal services the reefs can offer, such as marsh restoration. The current location, abutting the seawall, will not offer such insight.

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Environmental Journal: Narragansett Bay only as healthy as the waters that feed it

Saturday

Posted Jul 30, 2016 at 4:54 PM

Updated Jul 30, 2016 at 4:54 PM

By **Alex Kuffner**

Journal Staff Writer

kuffneralex

PROVIDENCE — When you think of Narragansett Bay, think also of the lesser-known brooks, streams and rivers that feed the body of water in the heart of Rhode Island.

That's the message of this year's edition of Watershed Counts, the annual report on the health of Narragansett Bay that is written with the support of more than 60 Rhode Island nonprofits, environmental groups, academic institutions and government agencies.

The quality of the water in the Bay is largely dependent on its headwaters through a network of countless smaller waterways spread throughout Rhode Island and Massachusetts, said Nicole Rohr, assistant director of the Coastal Institute at the University of Rhode Island, which oversaw the report with the Narragansett Bay Estuary Program and with support from the U.S. Environmental Protection Agency.

"A lot of people don't understand the connection [between] the Bay and tiny streams in places like Worcester or Taunton," Rohr said in an interview. "We want to highlight that they're all connected."

The Blackstone River, which originates in Worcester, and the Taunton River, which starts in the wetlands and bogs of southeastern Massachusetts, contribute more than 70 percent of the freshwater that flows into Narragansett Bay. The Pawtuxet River, which flows from streams in western Rhode Island, is also a contributor.

The threats in and around those waterways include residential and commercial development that reduce critical buffers, storm-water runoff that carries pollutants and problematic nutrients from fertilizers, and the potential disturbance of buried pollutants left over from industry.

Recent studies have documented the huge improvements in the health of Narragansett Bay.

According to test results released in 2015 by the Narragansett Bay Commission, which operates the largest wastewater-treatment system in the state, since the completion of its 3-mile-long combined sewer overflow tunnel in Providence, fecal coliform bacteria levels in the Bay are down by 50 percent. The data were based on weekly tests at 20 monitoring stations in the Upper Bay and connected waterways, with the largest decrease — of about 70 percent — taking place around the Point Street Bridge in Providence.

Also last year, the University of Rhode Island released the results of a decade-long study that found that levels of nitrogen and other nutrients in the Bay are now half what they were in the 1990s, resulting in clearer water and fewer harmful algae blooms.

Ensuring that the greater Narragansett Bay watershed continues to see improvements requires the work of a variety of players, according to the report.

"Protection of the waters does not spontaneously occur," the report says. "It takes clear vision, hard work and long-term dedication by individuals, communities, organizations and agencies to initiate change to improve environmental health."

Rohr pointed in particular to the local volunteer watershed councils. They include groups like the Buckeye Brook Coalition, in Warwick; the Narrow River Preservation Association, in North Kingstown; and the Friends of the Moshassuck, in Providence.

"The best advocates are often the people who live in the area, fish in the area or kayak there," Rohr. "They take the first steps to make it better."

The report highlights the work of some of these groups, from volunteers who support herring runs on the Saugatucket River in South Kingstown to community members who have cleaned up old industrial sites along the Woonasquatucket River in Providence to government agencies that gave critical protections to the Blackstone and Taunton rivers.

Projects throughout the Bay's watershed can have far-reaching consequences.

"Rivers are a reflection of whatever happens upstream," Arthur Gold, hydrology expert at the University of Rhode Island, said in the report. "Whatever's going on in the headwater streams — the extent of flooding that occurs, pollutants that they're carrying, the temperature of those particular streams — that gets transmitted, merges with these other headwater streams, and begins to influence downstream sites."

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Q+A: Ray Marshall, Executive Director of the Narragansett Bay Commission Talks About RI Water



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BY CHRIS THOMSON
AUG 29, 2016

PROVIDENCE, R.I., REMOVES NUTRIENTS & SAVES MONEY WITH RETROFIT

Facility uses IFAS process to reduce total nitrogen to meet strict standards



The Narragansett Bay Commission owns and operates the Field's Point Wastewater Treatment Facility (FPWWTF) in Providence, R.I. The commission's service area encompasses the metropolitan Providence and Blackstone Valley areas. Originally constructed in 1901, the FPWWTF provides secondary treatment for maximum monthly flows of up to 77 mgd and primary treatment and disinfection for an additional 123 mgd of wet weather flows; the total treatment capacity at the FPWWTF is 200 MGD.

The Solution

After receiving a National Pollutant Discharge Elimination System operating permit that required the plant to remove total nitrogen (TN) to 5 mg/L from May to October, the Narragansett Bay Commission chose [AnoxKaldnes Hybas](#) (Hybrid Biofilm Activated Sludge), an integrated fixed film activated sludge (IFAS) process as its solution.

In 2008, Veolia completed [AnoxKaldnes Hybas](#) designs for the upgrade of the FPWWTF to meet new seasonal effluent limits for TN and total inorganic nitrogen. The AnoxKaldnes Hybas process has the advantage of accepting a significant combined sewer overflow while maintaining a nitrifying biomass and eliminating the need to construct new aeration basins on a constrained site.



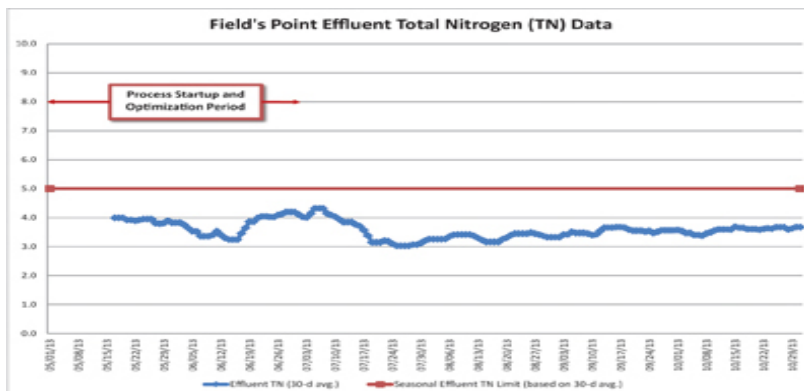
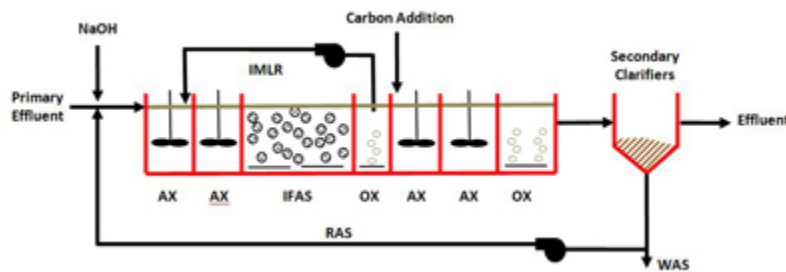
Process Description

The FPWWTF project involved process design, equipment supply, training, in-field services, performance testing and guarantees related to the [AnoxKaldnes Hybas](#) process. The biological nutrient removal process included the following unit processes:

- Pre-anoxic stage with two reactors per train for denitrification using the influent biological oxygen demand (BOD) as a carbon source and return mixed liquor from the aerobic stage for the source of nitrate;
- Aerobic nitrification stage with IFAS and post-IFAS oxic zones for BOD and nitrification;
- Post-anoxic stage with two reactors per train for additional denitrification using an external carbon source (if needed); and
- Re-aeration stage for removal of any residual carbon source and nitrogen gas stripping.

The Results

The IFAS conversion was accomplished without the need to add secondary clarifier capacity. FPWWTF has begun operation as the largest IFAS system in the world.



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A Hummel Report Investigation

Up and Running

Up and Running 9.01.2016



Five years in the making, Rhode Island's largest land-based wind farm is starting to generate electricity - and revenue - for its developer, the town of West Warwick and the Narragansett Bay Commission. Over the summer we have followed the construction of 10 turbines in western Coventry, and one in Portsmouth. Jim Hummel also talks with developer Mark DePasquale about allegations that he was behind 11th-hour legislation in June that would benefit his bottom line - at the

expense of ratepayers.

[Click here](#) for our previous report on this project.

SCRIPT

This is not a job for anybody with a fear of heights.

More than 400 feet up, workers are heading into the homestretch assembling a one and a half megawatt wind turbine in western Coventry. A crane operator on the ground and a supervisor at the top work together to maneuver the blades into place. Each blade weighs nine tons and measures 134 feet. The fit has to be exact.

Last month, this and two other turbines nearby began providing all of the electricity the town of West Warwick will need to power its municipal buildings. The town's taxpayers last year authorized borrowing \$18 million to buy the three turbines.

Wind Energy Development, and its owner Mark DePasquale, is building a 10-turbine wind farm in Coventry. DePasquale also has put up a replacement turbine at the site in Portsmouth where failed equipment sat idle for years. He'll soon begin selling electricity to the town.

The Narragansett Bay Commission, which in 2012 put up three of its own turbines on the Providence waterfront, has purchased another three in Coventry from Wind Energy Development, putting the Bay Commission well toward its goal of using entirely renewable energy for the agency's power needs.

We first reported on the Coventry project earlier this year, when the company was laying the foundations for what would eventually be last month's finished product.

It hasn't been the smoothest road for DePasquale - he has faced resistance from National Grid and ridden out numerous delays to get to where he is today. And at the end of this year's General Assembly session he faced allegations he was trying to get special legislation passed tailored specifically to Wind Energy Development. More on that in a moment.

Critics doubted whether DePasquale could succeed at a land-based project this size, the first of its kind and scope in Rhode Island.

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Wastewater Agency's Next Steps To Expand Renewable Energy

By [AMBAR ESPINOZA](#) • SEP 6, 2016

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• RIPR FILE PHOTO

Across the country, a growing number of major corporations, like Google and Amazon, are [buying their own renewable energy](#). They're not waiting for utilities to make the shift away from fossil fuels. Here in the Ocean State, the Narragansett Bay Commission is also moving in that direction to save money and reduce carbon emissions.

Listen

Listening...

1:59

The Narragansett Bay Commission owns and operates the two largest wastewater treatment facilities in the state. Cleaning water is expensive, which is why the wastewater agency is aiming to run on 100 percent renewable energy within two years.

By doing that, the commission will “basically, stabilize electric rates for our users for 25 years to come,” said Tom Uva, the agency’s director of planning, policy and regulation.

NBC is already saving roughly \$1.1 million a year in electricity with its existing wind turbines at its Field’s Point facility. It recently purchased two more wind turbines in Coventry and they’re working to buy a third. The agency also plans to build a biogas facility to capture methane from the human waste it treats to produce electricity.

“So we're looking at a very diversified energy portfolio,” said Uva. “The biogas project would always be running because we are always treating sludge and generating methane gas. And that would run consistently throughout the year.”

Uva said that’ll help maintain reliability, because his facilities can’t miss a beat when it comes to treating water. The agency is in the final stages of securing a permit for that biogas facility through the state Department of Environmental Management.

Agency officials are planning to buy or produce more energy than they need to balance fluctuations dictated by weather. If a power system were to go down, then the agency would still get electricity from the regional grid.

“To me the major [reliability] risk is what happens if they invent something 10 years from now where we don't need power from the grid anymore,” said Uva, “so then did we make a bad investment?”

But Uva thinks the agency is on the right path tapping into renewable energy and energy efficiency programs.

The commission has reduced its energy usage by more than 8 percent since 2003 through conserving energy alone. Uva said this year they are replacing all the facilities' light bulbs with LED ones to further reduce the commission's energy usage by roughly 6.3 percent.

Later this fall, officials will look into buying solar energy.

“And eventually we are going to get to a zero electric bill,” said Uva. “The other significant benefit is the reduction of our carbon footprint.”

Uva expects the agency to offset 20 metric tons of carbon emissions each year once it's running on 100 percent renewables. He said that will help Rhode Island meet its ambitious goals to reduce greenhouse gas emissions.

Note: This post has been updated.



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Rhode Island's Emerging Leaders — Iziarh Roberts Jr.

Friday, September 16, 2016

GoLocalProv and United Way of Rhode Island

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Where is Rhode Island going and who is going to take us there? Well, United Way of Rhode Island and GoLocalProv have teamed up in identifying some of the emerging leaders in Rhode Island and asking them questions about leadership and the pathway to a better future in Rhode Island.



Iziarh Roberts Jr.

Meet Iziarh Roberts Jr.

Title/Employer: Environmental Engineer/Narragansett Bay Commission

Age: 32

Who has been your most important mentor and why?

I never really had a mentor. I had my two headstrong parents that taught me how to be "independent" at a very early age. I was raised with the mentality that whatever I wanted to get that I would need to acquire it on my own with my own skills and will. This, coupled with my personal interests, became my motivation which has led and guided me onto my current path. I did not want to just work but if I did work I wanted it to mean something other than "labor". I wanted my endeavors to be seen and/or contribute to something useful and significant. I feel accomplished when I am productive and that has led me on ever since childhood. Of course along the way there were a few people who motivated, supported, and inspired me. I am grateful for them but I had no mentor. I had my parents' upbringing mold me into the man I am today. Great parents make a world of a difference. If I had a so-called "mentor" it would be them.

As an emerging leader what have you learned from success and failure?

Right off the bat, in my experience, I have learned more from failure than success. Success does not exactly promote personal growth but failure does. Failure can actually improve you to become better at anything you are trying to achieve. With determination you can push harder for success and when you succeed you appreciate it far more than if the success came easily. I see success as more of a reward but it can also mean the end of a journey. As a result, a person may become satisfied for a time. However, success can and most often does provide the courage to take on new goals or challenges and face them head on.

How are you making (Rhode Island) better?

I am a part of the Narragansett Bay Commission need I say more? Yes I do because many residents do not know exactly what we do. We perform a few civil functions that most people take for granted such as wastewater treatment. RI Activities such as fishing, swimming, keeping certain beaches open to the public and helping to improve water quality for those who make their living using Narragansett Bay and the connected waterbodies are directly affected by the water quality improvement efforts of the Bay commission. When it comes to working with cities and towns and assisting the general public with any sewage and/or related drainage issues, I assist in any way that I can in terms of data use, asset management, and maintaining the tools we have to solve these problems using engineering expertise. I provide elementary information and tools used to resolve most problems and projects within the NBC district that are all aimed at reducing pollution, maintaining the collection system, improving water quality, and servicing RI residences by handling and treating their wastewater. I am part of the team of amazing and dedicated individuals that are responsible for handling these tasks in Rhode Island.

Favorite restaurant: Ten Prime Steak and Sushi

Most Important Book: Mary Shelley's Frankenstein

Favorite Place in RI: Misquamicut Beach, Westerly

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Investing in Infrastructure Can Have Big Payoffs, MINDSETTER™ Mesolella

Tuesday, September 20, 2016

Vincent J. Mesolella, Guest MINDSETTER™

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We can all agree that Rhode Island has many things going for it: our coast line is unparalleled in its beauty, our food is top notch, our colleges and universities provide intellectual stimulation, and our architecture is a dazzling testament to the historical significance of our state.



As Chairman of the Narragansett Bay Commission, I'm constantly thrilled to see how far we've come, from a clean water perspective, in making Rhode Island a great place to live. Narragansett Bay is cleaner than it has been in 150 years: shellfishing and beach closures have dropped dramatically since 2008 when Phase I of the NBC's Combined Sewer Overflow project went on line and Rhode Island's commercial fisheries and recreational uses are growing.

On land, however, it's often a different story, especially for business growth. Over and over again, we hear that our small state poses big obstructions to people trying to build or grow business here. Over and over again, we hear from potential transplants that the cost of Rhode Island government is too high, the money trail is too unidentifiable, and the outcomes not proportional to the dollars spent.

Just as cleaning up Narragansett Bay required a multi-faceted approach, not to mention a great deal of planning, coordination, and just plain hard work, improving our business climate will require creativity and common sense.

Foremost, we must develop uniformity in our permitting and contract processes. We've already done a good job in creating uniform building and fire codes throughout our small state. Why, then, can't we bring the same model to planning boards, labor unions, police, fire, and teacher contracts? In trying to attract and cultivate business in our state, we must realize that time is a businessperson's worst enemy. Every day spent kicking a bureaucratic can down the road means lost opportunity, lost income, and lost positive economic change in the state. Adopting model codes that will limit bureaucratic discretion and apply to the thirty-nine cities and towns will go a long way toward dismantling some of the obstructions to business growth in Rhode Island.



I also propose that we amend or repeal the Administrative Procedures Act, which I consider to be one of the biggest impediments to improving our economy. Due to the APA, the Executive Branch is allowed to create law through regulation, and therefore able to side-step the prerogative of the General Assembly to craft and pass laws that represent the will of the electorate and impact business. The APA ensures that there is no equitable process for passage of regulations as there has traditionally been for laws, yet those regulations have the same impact as law. In my opinion, this denies our legislators the opportunity to do the jobs for which they have been elected and,

more importantly, denies their constituents the right of full representation.

A healthy environment and a healthy economy go hand-in-hand. We need to cultivate a robust business economy in order to maintain and continue the improvements we are experiencing now in our rivers and Narragansett Bay.

Vincent J. Mesolella is an experienced real estate developer and contractor. He is a charter member of the Narragansett Bay Commission, having served since its inception in 1980, and as Chairman since 1988, overseeing nearly \$1 Billion in clean water infrastructure. Mesolella served in the Rhode Island House of Representatives from 1984-1998, representing North Providence, including ten years as Deputy

House Majority Whip.

(1)

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FIVE QUESTIONS WITH

5Q: Raymond J. Marshall

Executive director, Narragansett Bay Commission



PBN PHOTO/MICHAEL SALERNO

Posted: Friday, October 28, 2016 12:05 am

BY ELI SHERMAN | [SHERMAN@PBN.COM](mailto:ELI_SHERMAN@PBN.COM) (MAILTO:BY ELI SHERMAN | SHERMAN@PBN.COM)

1 What does being elected National Association of Clean Water Agencies president mean to you and the commission?

For me ... it is a great honor to represent what I am convinced are the most effective environmentalists in the country. For the commission, it's a real acknowledgement of the success we've had not only in cleaning up Narragansett Bay, but also becoming a utility of the future – focused on renewable energy, top-notch science, and improving the community – in addition to our primary responsibility of clean water.

2 How do you plan to lobby Congress?

Our public investments in clean water have yielded incredible environmental, social and public health returns. ... In Rhode Island, we've got a knowledgeable and responsive congressional delegation, and we plan on working closely [with them].

3 How has Narragansett Bay changed in the last 30 years?

In 1980, when the Narragansett Bay Commission was created, the bay and the urban rivers were filthy. Now, after 35 years of infrastructure improvements and diligent leadership ... Narragansett Bay is cleaner than it has been in 150 years. ... Children today will grow up knowing a bay and rivers that have always been clean and available to them.

4 What more should Rhode Islanders expect for the future?

We'll continue to see water-quality improvements: more [open] shellfishing days per year and greater access to bathing beaches. We can also expect the commission to become 100 percent reliant on renewable forms of energy within the next three years. And now the commission has opened the doors of the most advanced water-quality laboratory in New England. ... We are ensuring that Narragansett Bay is and will continue to be a great place to play, work and enjoy.

5 How does the commission's work interconnect with economic opportunities for the state?

Our focus is to be a part of the solution in creating economic opportunity. ... Rhode Island's fishing and shellfishing industries are booming. Everyone knows Rhode Island clams and oysters are superior, and it's because of the quality of our water. But we're also really excited about some of the "quieter" opportunities, in renewable energy, for example, or in ways to use those products we traditionally considered waste – biosolids or effluent – and turn them into resources. •



TRENDING Does a Republican Candidate Have the Edge

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Vin Mesolella: 17 to Watch in 2017 in RI

Friday, December 30, 2016

GoLocalProv Business Team



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There are many reasons why Rhode Island was able to keep 3,000 jobs in Rhode Island and build a new-mega facility for Citizens Bank in Johnston, but according to Citizens Banks' top official overseeing the project it would not have happened if Narragansett Bay Commission's Chairman Vin Mesolella had not already developed expansion plans and engineering in the area and been able to implement a water and sewer plan immediately.

"When we looked at the final site (in Johnston), we thought there was no easily available water and sewer — it was looking like it would have been impossible to develop," said Mike Knipper, Head of Property and Executive Vice President for Citizens.

"We meet with Mesolella and in 24 hours and he had a solution. Everything went right."

Mesolella's planning initiatives saved Citizens Bank an estimated \$7 to \$9 million development costs, expedited the projected by an estimated year, and in the final analysis allowed the project to be a reality. "We could not have made it happen at that site without Mesolella and the rest of the NBC team," said Knipper.

Knipper was also complimentary of Governor Raimondo, Stefan Pryor, Johnston Mayor Joe Polisina and the responsiveness of both DOT and DEM, but it was Mesolella's foresight and energy that made the project happen. We look forward to see what Mesolella does in 2017 and beyond.



Chair of the Narragansett Bay Commission

Related Slideshow: 17 to Watch in 2017 in Rhode Island



Molly O'Brien: 17 to Watch in 2017 in RI

O'Brien, who may be Rhode Island's most-liked TV broadcast journalist, is poised for some big moves in 2017.

She was most recently at WJAR Channel 10, where she was the incredibly popular traffic, technology, and social media reporter.

Chances are, you checked in and got a traffic report from O'Brien more than once.

The television newswoman, who got her degree in broadcast journalism (Summa Cum Laude) from Arizona State University, got start as a weather and anchor traffic at KVEW in Washington, followed by work as a morning show host and general assignment reporter for KBMT in Texas, before landing in Rhode Island in 2012, where she got "Best Traffic Reporter" in RI Monthly in 2012 and "Best Morning Personality" in 2014.

O'Brien's work as an animal rescue advocate has won over even more fans, if that's at all

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



PUBLIC NOTICE

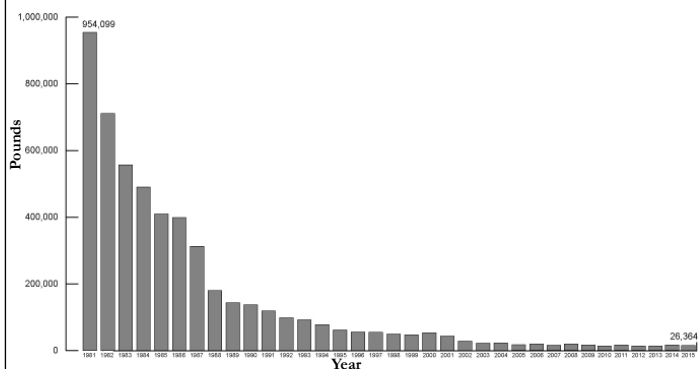
Firms in Significant Non-Compliance

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 C.F.R. 403.8(f) (2) (vi) and Article 10 of the Narragansett Bay Commission, Rules and Regulations require the NBC to publish annually the names of all industrial users in Significant Non-Compliance (SNC) with pretreatment standards and other pretreatment requirements during the preceding year. Companies deemed to be in Significant Non-Compliance are those industrial users who have violated any of the Significant Non-Compliance criteria listed, as defined by Article 2 of the NBC Rules and Regulations during the time period from October 1, 2014 through December 31, 2015. 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, 1981-2015



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

Most businesses located in the NBC district are to be commended for the fine job they have done treating their process discharges to remove toxic pollutants. In 1981, local industries discharged 954,099 pounds of heavy metals such as copper, nickel and zinc and 80,440 pounds of cyanide to the Field's Point Wastewater Treatment Facility. Since 1981, the total metals and cyanide loadings to the Field's Point facility have been reduced by 97.2% and 98.6% respectively. Similar toxic loading reductions have been observed at the NBC Bucklin Point facility.

Bucklin Point Service Area

Lincoln		
Company Name	Violations Cited	Present Status
Denison Acquisition Company, LLC dba Denison Pharmaceuticals, LLC.	TTO (1,2)	Firm is now in compliance.
Putnam Holdings, Inc. dba Terra Pack	Failure to submit reports on time (6)	Reports have been received.
Pawtucket		
Bliss Manufacturing Company, Inc.	Ag (2), CN (2)	Firm is now in compliance.
Ecological Fibers, Inc.	Zn (2)	An Administrative Order was issued assessing an administrative penalty of \$22,000. Firm is now in compliance.
Mercury Print & Mail Company, Inc.	Failure to submit report on time (6)	Report has been received.
New England Linen Supply, Inc.	Failure to submit reports on time (6)	Reports have been received.
Providence Wire Creations, Inc.	Failure to submit reports on time (6)	Reports have been received.
R & D Manufacturing, Inc.	Failure to submit report on time (6)	Report has been received.

Field's Point Service Area

Johnston		
Company Name	Violations Cited	Present Status
G. Tanury Plating Company	Pb (2)	Firm is now in compliance.
North Providence		
DFI-EP, LLC	Ni (2), CN (2)	An Administrative Order was issued assessing an administrative penalty of \$23,500. Firm is now in compliance.
Providence		
Bella's Jewelry	Failure to submit report on time (6)	Report has not been received.
JC Gorham Co.	Failure to submit reports on time (6)	Reports have been received.
Rhode Island Recycled Metals, LLC	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. Marshall, PE, *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

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

NARRAGANSETT BAY COMMISSION

Perfect Compliance

in recognition of Significant Industrial User Perfect Compliance in 2015

The Narragansett Bay Commission recognizes these Significant Industrial User companies for perfect regulatory compliance with Pretreatment Program regulations during 2015:



A Harrison & Company, Inc.

Dominion Energy

Manchester Street, Inc.

Godfrey & Wing, Inc.

dba Impco, Inc.

John H. Collins & Sons Company

Narragansett Jewelry

dba C&J Jewelry Company

Stackbin Corporation

Technodic, Inc.

Truex, Inc.

Darlene Group, Inc.

Electrolizing, Inc.

Hord Crystal Corporation

Induplate, LLC

Interplex Engineered Products, Inc.

Metallurgical Solutions, Inc.

Pawtucket Power Associates

Providence Metallizing Company, Inc.

Tanury Industries, PVD, Inc.

Tiffany and Company

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.

Vincent J. Mesolella, *Chairman* • Raymond J. Marshall, P.E., *Executive Director*

One Service Road, Providence, RI 02905

401-461-8848 • www.narrabay.com

RI Treasurer Magaziner and Narragansett Bay Commission Honor Twenty Organizations for Environmental Achievement

Post Details

- Posted April 06, 2016
- Filed under [General](#)

RI Treasurer Magaziner and Narragansett Bay Commission Honor Twenty Organizations for Environmental Achievement

On April 5, 2016, the Narragansett Bay Commission (NBC) held its twenty-first annual Environmental Merit Awards ceremony. Each year, NBC recognizes those companies among its 1500 permitted users who have achieved perfect regulatory compliance and outstanding pollution prevention in the previous year.

The Narragansett Bay Commission's Pretreatment Program is one of the most successful in the United States. In 1991 and 1998, the program was named Best in the US by the US Environmental Protection Agency. In 2009, the NBC's program received the **Excellence in Pretreatment Award** from USEPA for Region 1.

The NBC also honored **The Foundry Associates, Inc.** with a Stormwater Management Award for efforts to reduce and manage the flow of stormwater from their facilities in Providence into the combined sewer system, thereby enhancing protection of our urban rivers and Narragansett Bay.

Rhode Island General Treasurer Seth Magaziner delivered the keynote address. Magaziner is a strong advocate of both the economy and the environment. Since taking office, he has successfully championed legislation establishing new green infrastructure programs at the Rhode Island Infrastructure Bank. These new programs will put tradesmen and women back to work on energy efficiency and renewable energy projects across the state, helping Rhode Islanders save on energy costs while reducing our state's carbon footprint.

NBC Chairman Vincent J. Mesoella explained the importance of these awards, "Being perfect isn't easy, and the Narragansett Bay Commission appreciates extra efforts that these organizations make to protect

our urban rivers and Narragansett Bay. Ultimately their hard work makes Rhode Island a better place for us all.”

The NBC honored nineteen local companies for achieving perfect compliance with all parameters in their NBC permits.

2015 Perfect Compliance Award Winners

A Harrison & Company, Inc.

Darlene Group, Inc.

Dominion Energy Manchester Street, Inc.

Electrolizing, Inc.

Godfrey & Wing, Inc. dba Impco, Inc.

Hord Crystal Corporation

Induplate, LLC

Interplex Engineered Products, Inc.

John H. Collins & Sons Company

Metallurgical Solutions, Inc.

Narragansett Jewelry dba C&J Jewelry Company

Pawtucket Power Associates

Providence Metallizing Company, Inc.

Stackbin Corporation

Tanury Industries, PVD, Inc.

Technodic, Inc.

Tiffany and Company

Truex, Inc.

Univar USA, Inc.

The NBC also made grants to fifteen local organizations for Earth Day clean-ups of local waterways as a part of the Chairman's River Restoration Initiative. Established in 2003 by NBC Chairman Vincent Mesolella, the program has supported dozens of community groups and thousands of volunteers in efforts to clean up area shorelines and parks

Narragansett Bay Commission Not Affiliated with American Water Resources of Rhode Island

Post Details

- Posted June 07, 2016
- Filed under [General](#)

Narragansett Bay Commission Not Affiliated with American Water Resources of Rhode Island

The Narragansett Bay Commission (NBC) has learned that sewer customers have received a solicitation from American Water Resources (AWR) of Rhode Island, offering a Sewer Line Protection Program for repair or replacement of the customer's sewer service line should the line fail in the future.

American Water Resources of Rhode Island's mail solicitation is **not** affiliated with or endorsed by the NBC. The NBC recommends to all ratepayers interested in AWR's offer to fully research American Water Resources of Rhode Island and the details of the solicitation independently of the ratepayer's affiliation with the NBC.

Narragansett Bay Commission Honors Late Commissioner with Building Dedication

Post Details

- Posted June 22, 2016
- Filed under [General](#)

Narragansett Bay Commission Honors Late Commissioner with Building Dedication

On Tuesday, June 21, the Narragansett Bay Commission (NBC) dedicated its new Water Quality Science Building to a former Commissioner, the late Leonard E. Walker, Sr., who served on the Board of Commissioners from 1993 until his death in 2003.

The Water Quality Science Building houses the most advanced laboratory of its kind in southern New England and features technologies found in only a handful of labs around the country.

- The building boasts a state-of-the-art Class 10,000 clean room facilities that will allow the NBC to obtain ultra-low level detection of pollutants found in wastewater and riverine inputs in the parts per trillion range, using EPA 1600 series clean sampling and analytical methods.
- This new facility demonstrates the NBC's expertise and commitment to monitor, analyze and report important environmental data necessary to protect our state's most valuable resource, Narragansett Bay, efficiently and with high levels of sophistication. In 2015, the NBC's monitoring staff collected 29,703 samples on which the Lab performed 112,634 parameter analyses.
- The building is designed with the future in mind and is expected to be able to meet ever increasing regulatory and technological challenges for decades to come.

"This is a proud day for the Narragansett Bay Commission," said Chairman Vincent Mesoletta, "and the culmination of an eighteen year process to bring the highest level of technology to our laboratory. Our friend Leonard Walker was a passionate advocate for the environment and education, and we are so tremendously pleased to honor him today."

Len Walker, Jr., son of the building's namesake remarked, "Our family has long valued our connection with the NBC and we could not be more appreciative of this tribute to my father."

The building was designed by CDM Smith and constructed by the Calson Corporation.

Infrastructure, Advocacy Yield Gold Medal Water Quality for 2016 Save The Bay Swim

Post Details

- Posted August 16, 2016
- Filed under [General](#)

Infrastructure, Advocacy Yield Gold Medal Water Quality for 2016 Save The Bay Swim

August 11, 2016 -- This weekend, the world's finest marathon swimmers, sailors, rowers, and canoeists will vie for Olympic glory in the Atlantic waters of Rio de Janeiro. At the same time, 500 swimmers and nearly 200 kayakers will take to the waters of Narragansett Bay to traverse 1.7 nautical miles from Newport to Jamestown in the 40th annual Save The Bay Swim. While these two sets of athletes share a desire for personal fulfillment through sports, the risk they each will undertake for their sport are vastly different: the world's elite will swim, sail, and row in the dangerously dirty waters of Rio, while Rhode Island's athletes will take to a Narragansett Bay that is cleaner than it has been in 150 years.

The central pollution issue at the Olympics is the chronic lack of adequate sewage treatment in Rio de Janeiro. Copacabana Beach and Guanabara Bay, sites of the marathon swimming, sailing, rowing and canoeing events, are not only laden with visible garbage and other debris, but also teeming with sewage-related pathogens, from rotaviruses that can cause diarrhea and vomiting to drug-resistant, potentially fatal "superbacteria."

In Rhode Island, however, four decades of clean water advocacy and infrastructure investment have yielded a vibrant Bay that supports a robust and growing shellfishing industry, and boasts water quality so improved that bathing beaches as far up the Bay as Sabin Point are being reopened. The lynchpin of the improvements has been comprehensive wastewater treatment plant upgrades of the Narragansett Bay Commission's (NBC) Field's Point and Bucklin Point facilities, and the NBC's Combined Sewer Overflow project, whose first two phases have captured and treated over 7 billion gallons of combined sewage since 2008. A planned third phase should bring even more water quality improvements.

"In less than a generation, we've been able to clean up over a century's worth of pollution through a combination of infrastructure, policy, and advocacy," said NBC Executive Director Ray Marshall.

"Because of the vision of leaders like former Governor Garrahy, NBC Chairman Vincent Mesolella, and Senator John Chafee, and with the support of the voters of Rhode Island, we have been able to embark

on some very ambitious projects---like deep rock tunnels to capture CSOs and facilities to remove nitrogen---to create a cleaner Bay.”

In 1977, the first year of the Save The Bay swim, the planned starting point in Jamestown was designated by the R.I. Department of Health as too polluted for human contact or ingestion. Swimmers had to climb into their rowboats and row out 250 feet to where the water was clean enough to begin the event. And, in the early years of the Swim, swimmers emerged from the water with oil slicks and tar balls on their suits. Today, participants confidently wade into clean water and beautiful eelgrass beds to start the Swim, and last year reported schools of menhaden swimming beneath them.

“Infrastructure investments are not inexpensive, but they are crucial for healthy marine ecosystems and healthy communities and invaluable to the quality of life we enjoy throughout the Narragansett Bay region. If not for the collective support of voters, taxpayers, ratepayers, legislators, advocacy organizations and others who share our vision, our Bay would be a vastly different place than it is today,” said Save The Bay Executive Director Jonathan Stone. “The Combined Sewer Overflow project, water treatment plant upgrades, sewer tie-ins, and elimination of cesspools have made a world of difference to Narragansett Bay.”

While the southern Bay deserves a gold medal for water quality improvement, there is more work to be done. Much of the upper Bay and Providence River, although cleaner than ever before in our lifetimes, remain off limits to swimming and shellfishing. “Our goal is to reach the point when we can hold the Save The Bay Swim in waters right off of Fields Point. We’re not there yet. But together, as advocates, utilities, policy makers and citizens, we will continue to extend our tremendous water quality progress to the upper reaches of Narragansett Bay,” said Stone.

“Perhaps someday we will lure Olympic athletes to the upper Bay; in the meantime, we can all support world-class water quality for the citizens and visitors of our state. We wish all the Save The Bay swimmers and kayakers a day of great personal achievement and enjoyment on our beautiful and healthy Bay,” Marshall said.

###

NBC NEWSLETTERS



NBC Pipeline

January 2016

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*

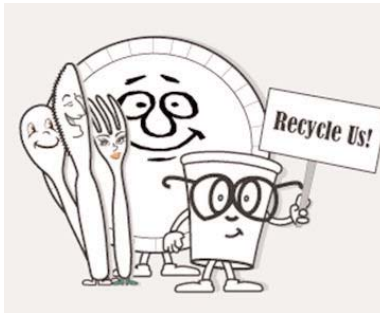
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
					New Year's Day	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
	 Martin Luther King Jr. Day		CAC Meeting 12 PM		 Game @ 7:05	
24	25	26	27	28	29	30
 Game @ 3:05		Board of Commissioner's Meeting 11 AM			Payday	
31						

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

News Briefs...

Enjoy Your Warm Cup of Joe Guilt-free!

Love a warm cup of Dunkin' Donuts or Honey Dew Donuts coffee or tea in the morning, but hate to use those Styrofoam cups that are bad for the environment? Now thanks to RI Resource Recovery Corporation (RIRRC) you don't have to feel guilty anymore! Since June, RIRRC has started collecting foam products to be recycled; this includes food-service foam, coffee cups, take-out food containers and rigid packing foam. There are a few catches though before you make the trip and show up with a stack of cups:



- The foam must be dropped off at the Central Landfill's small-vehicle unloading/disposal area during normal business hours (visit their website for hours: <http://rirrc.org>);
- Foam must be separated depending on type, rigid foam separate from food-service foam; and
- All foam products must be clean, dry and bagged in clear or translucent bags.

This foam now goes to a facility in Pennsylvania where the foam is made into pellets and use items such as picture frames or crown molding. Give new life to your disposable Styrofoam cups and containers and recycle it at RIRRC!

--Submitted by: Pamela Reitsma & Barry Wenskowicz

Speak at an Upcoming Interdepartmental data meeting at NBC

The PP&R Division regularly hosts monthly informational meetings to allow NBC staff the opportunity to share information about the important projects NBC is working on. These monthly presentations allow NBC to achieve the Communication Goal outlined in NBC's Strategic Plan recommending we enhance internal communications so that staff is fully aware of the important work done each day. NBC's PP&R department will be inviting speakers, but do encourage staff to contact them to volunteer to speak and enlighten the NBC team about the latest happenings. If you would like to give a presentation, please contact **John Motta** at ext. 471.



This month's Project Update presentation will feature NBC's Environmental Scientist Pamela Reitsma who will present on "Evaluating the Success of Phase I of the NBC's CSO Abatement Program." This presentation will discuss the water quality improvements measured from NBC's data on Phase I of the CSO Abatement Program.

The presentation will be held in the main conference room on Thursday, January 28th at 1:30 PM. Speakers will be featured each month immediately following the 1:00 PM monthly interdepartmental data meeting. All staff is welcome, but please be sure that you receive appropriate approvals from your supervisor to attend.

-- Submitted by: John Motta



Welcome...



Michael J. Hernandez, FP Operator I



David Fraioli, FP Operator I

CAC Chairman Receives Certificate of Appreciation

At the December 15th Board of Commissioners meeting long time Citizens Advisory Committee Chairman, Harold Gadon, was recognized for his service and was given a plaque of appreciation. He has stepped down as Chairman but will still be a part of the CAC. Howard Schacter, another long time member of the committee, will now take over as Chairman for the new year.



From left to right: Vin Meselella, Harold Gadon, Jan Gadon & Ray Marshall at the December Board or Commissioner's meeting.

NBC Launches Employee Safety Awareness Program

NBC is launching a new company-wide "Employee Safety Awareness Program." This program will promote employee awareness of and involvement in safety-related activities, such as hazard identification and correction throughout the course of daily work activities at NBC. To jumpstart the program, a safety slogan and logo contest will be held among all NBC employees. The NBC employee or employee team that designs the winning safety logo and slogan will have their design utilized throughout NBC to promote safety awareness and will be recognized at a NBC Board Meeting.



Safety Logo Contest Guidelines:

Entries for the contest must meet the following criteria:

- Logo size must be 8 1/2" x 11"
- Logo may be single or multi-color
- Logo must promote workplace safety
- Logo MUST depict an original idea
- Creativity is essential and humor is encouraged
- Computer graphics are acceptable
- Logo will be widely distributed throughout NBC and may be used on safety promotional materials, safety training materials, etc.
- Name of the employee or team members must accompany submittal

All submitted logos/slogans will be judged and the winning entry selected by the NBC Directors. All entries must be submitted by March 1, 2016. Please submit entries to: daucoin@narrabay.com

January EH&S Trainings will soon be announced in the Training Central portal on BayNet. Please obtain your supervisor's permission prior to enrolling in any safety training class.

--Submitted by: Dave Aucoin

Confined Space Rescue Drill at Field's Point



On Monday, December 7, members from the Providence Fire Department (PFD) conducted a Confined Space Emergency Rescue Drill at the Field's Point Wastewater Treatment Facility. The drill took place in Primary Clarifier Tank #2, which was cleaned and de-energized beforehand by Field's Point Operations personnel. The rescue scenario for the drill involved a NBC Operator who had slipped on the bottom surface of the tank, suffering a broken ankle and therefore requiring the need for emergency rescue. A 200 lb. manikin was used to simulate the injured NBC Operator.

Under OSHA regulations, NBC is required to annually assess and evaluate the rescue capabilities of its first responders during a confined space emergency. The PFD is one of five



departments within NBC's Servicing District that has confined space rescue-trained personnel on staff at all times. The PFD response was extremely sharp and innovative throughout the drill, as the ladder basket on one of the engines was used to lower rescue personnel into the confined space. PFD was able to not only utilize NBC's Confined Space Entry Permit throughout the drill, but more importantly had the chance to further familiarize themselves with one of the many different types of hazardous work environments that Field's Point O&M employees are exposed to on a daily basis.

Special thanks to the PFD for coordinating with NBC to conduct this important annual exercise!

--Submitted by: Dave Aucoin

NBC Bottle Filling Stations Reduce Plastic Usage

What could be better than having filtered, chilled and clean water to drink throughout the day? How about being able to enjoy this water while knowing that you are doing your part to help save the environment, one plastic water bottle at a time! During 2015, the NBC installed two water filters in the COB and one at Field's Point. Staff has been doing a great job filling reusable water bottles to both save money on buying bottled water and cutting back on the amount of plastic bottles used. The first floor of the COB just hit the 1,000 water bottles saved mark since installing the unit in September. The third floor of the COB has saved 1,461 since October and the Field's Point fountain has saved 2,029 water bottles since April. Keep up the good work!

--Submitted by Kim Kirwan





NBC Pipeline

February 2016

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

Calendar of Events *for February*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Groundhog Day	3	4	5	6
7	8	9	10	11	12	13
14  Valentine's Day	15  President's Day	16	17 Ash Wednesday	18	19 Payday	20
21	22	23	24	25	26	27
28	29				Payday	

News Briefs...

2016 RI Spring Flower & Garden Show

The Rhode Island Spring Flower & Garden Show is kind enough to offer NBC employees discounted admission tickets again this year. **The Show runs Thursday February 18th - Sunday February 21st at the RI Convention Center. Hours of operation are Thursday 10 AM - 7 PM, Friday & Saturday 10 AM - 8 PM and Sunday 10 AM - 6 PM.**

NEW THIS YEAR---

On Friday and Saturday (February 19th & 20th) they will feature live music in the gardens. Hear the ever popular Reminisce on February 19th from 5 PM - 8 PM. Reminisce will showcase music from the 50's & 60's. Be sure you are there to witness the nation's top Steely Dan Tribute band, Hey 19, on February 20th from 4 PM - 7 PM.



Under this special offer NBC employees will pay only \$14 for tickets (a \$5 savings off the general admission at the door price of \$19) to attend the premier flower show in New England. Tickets are good for any one of the four show days.

Redemption is quick and easy!

- Go to www.flowershow.com
- Go to the official flower show ticket store and click purchase tickets
- Select the \$17 advanced ticket
- Input the number of tickets that you would like to purchase.
- Select go to checkout and enter code **FSMEMPDISC** in the coupon code section.
- Click apply and your ticket price will drop down to \$14.

In order to receive this discount, tickets must be purchased by February 10th.

P-Bruin Ticket Special for Upcoming March Games

Friday, February 19th is the last day to purchase tickets for the March P-Bruin's games; Friday, March 4th at 7:05 or Sunday, March 6th at 3:05. Tickets are \$20 and include a free hotdog and soda! All children in the group will receive a free pair of inflatable thunder sticks delivered to their seats and all tickets purchased through the special offer will even include a coupon for \$10 off a purchase of \$50 or more to Dick's Sporting Goods. Everyone coming out through this offer will get great lower level seating!



Contact **Talia Girard** at ext. 394 if interested.

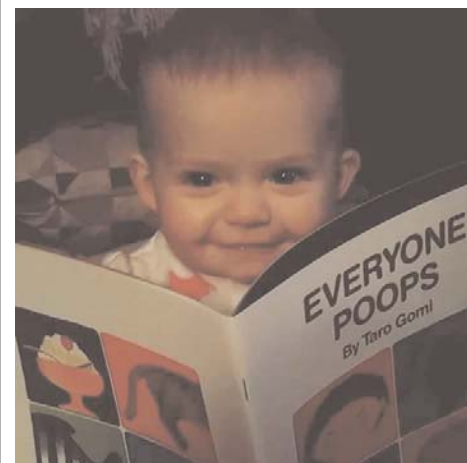
Congratulations...

To Senior Fiscal Clerk **Jean Barnes** on the birth of another grandchild! Jean's daughter Amanda gave birth to a healthy baby boy, Cristian Carter Vaz on December 4, 2015, weighing 7 lbs., 11 oz.



Everyone Poops

Operations & Maintenance Coordinator at Field's Point, **Ron Goodinson's** granddaughter Lucia is making her Pipeline debut! Lucia is 10 months old. Her parents are both educators and reading is a huge part of her early life. With two family members in the wastewater field, Ron and Ron's brother, Scott Goodinson, Superintendent of Warwick WWTF, she is already preparing for her first tour of Fields Point.



Casual Day Fund Updates

The NBC Casual Day Charitable Giving Fund made employee-suggested donations to two worthy organizations over the holiday season: The Multiple Myeloma Research Foundation (MMRF) and

A Wish Come True. Multiple myeloma is the second



most common blood cancer, and although it is considered incurable, it is very much a treatable disease thanks to recent advancements in cancer research. The Multiple Myeloma Research Foundation (MMRF), however, has revolutionized the way multiple myeloma is treated, substantially improving the life expectancy of multiple myeloma patients. Since its inception, the MMRF has helped introduce nine new drugs and through the power of new technology, genomics, and immunology, lives are now being saved.

A Wish Come True is the oldest wish granting organization in RI, founded in 1982. The organization grants the wishes of medically qualified children ages 3 through 18 who have a life-threatening illness and live in Rhode Island and areas of southeastern Massachusetts.



Would you like to request a donation for a 501(c)(3) charitable organization? If you currently contribute to the Casual Day Fund, simply forward your request to one of the committee members (Claudette Kalf, Kimberly Kirwan, Leah Foster, Patricia Pinilla, Jacqueline Giroux, Lori Vernon, Renee Rinaldi Patterson, or Jamie Samons). If you are not currently contributing to the Fund, contact payroll and join the effort!

IM Reaches 1,000 Consecutive Days Without a Lost Time Injury

IM Manager, Meg Goulet would like to recognize the great work that all IM personnel have been doing over the years to stay safe. Looking back at almost three years' worth of records IM reached 1,000 consecutive days without a lost time injury! Meaning any work related injury that results in 1 or more days away from work. The counting of days begins on the day after the actual injury date.

This is an awesome record that shows safe work practices are being implemented and encouraged among all staff here at IM. Great Job!



-- Submitted by Meg Goulet

NBC Employees Honored at NEWEA's Annual Conference

NBC received two prestigious awards at The New England Water Environment Association's (NEWEA) annual conference in Boston, Massachusetts.

NEWEA consists of New England's water quality professionals who are responsible for the water people use on a daily basis. It's taken from any home or business, treated and then returned to the environment for future use. The conference held every year attracts over 2,000 engineers, consultants, scientists, wastewater operators and students. It features exhibits and technical sessions for those who attend and allows professionals to network.

NBC received the George W. Burke, Jr. Facility Safety Award and NBC Biologist Nora-Jean Lough received the Alfred E. Pelouquin Award for the 2015 calendar year.



From left to right: NBC's Barry Wenskowicz, Walter Palm, Jim McCaughey, Nora-Jean Lough, Dave Aucoin, Tom Uva, & DEM's Alex Pinto, Matt Puglia and Bill Patenaude.

The George W. Burke, Jr. Facility Safety Award recognizes excellence and effectiveness in safety programming for municipal and industrial wastewater facilities. The documented and illustrated safety program and safety record of the facility for the preceding calendar year are the primary criteria for the award. NBC's Safety Compliance Coordinator David Aucoin accepted the award.

NBC Biologist, Nora-Jean Lough received the Alfred E. Pelouquin 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.



NBC Biologist, Nora-Jean Lough with the Alfred E. Pelouquin Award.

Nora-Jean Lough Receives Crystal Crucible Award

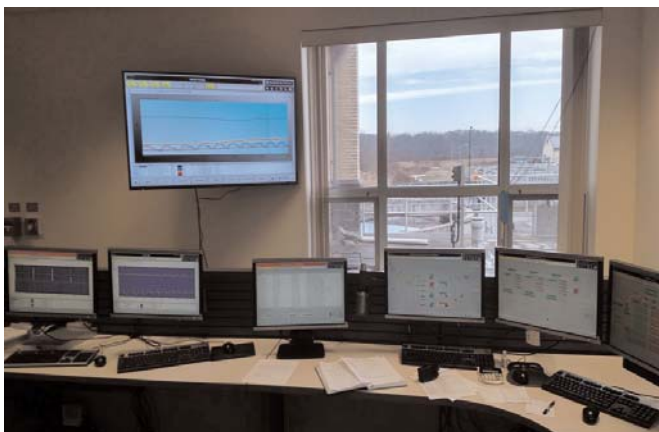
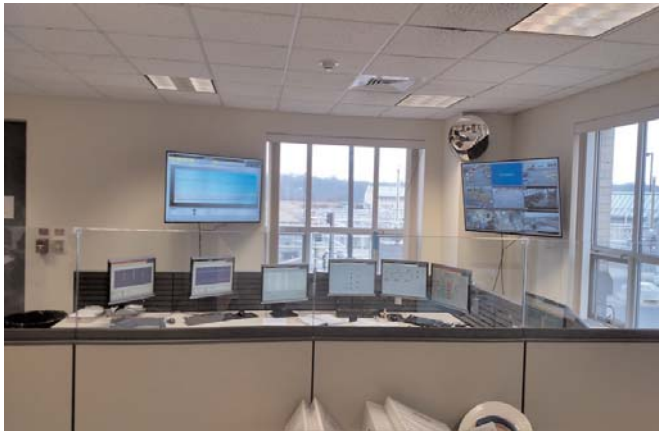
Along with receiving the NEWEA Alfred E. Pelouquin Award, NBC Biologist, Nora-Jean Lough received the Crystal Crucible Award from the NEWEA Laboratory Practices Committee. The Crystal Crucible Award is a recognition of the outstanding work, community service, and positive contributions to the wastewater laboratory field within New England. Congratulations Nora!



--Submitted by Walter Palm

Bucklin Point Control Room Gets a Makeover

The Control Room at Bucklin Point was recently updated as part of the FY 2016 Capital Budget Plan. The room was built as part of construction contract 807 in 2004 and was in need of some TLC. The makeover includes painting of all the walls, replacement of the tile flooring, new ceiling tiles, new furniture including desks, partitions, chairs and file cabinets and 2 new 50-inch TV monitors. In addition, the Supervisors' Office and Control Systems Associate's Office were repainted, received new tile flooring, new ceiling tiles and new furniture also. The entire Control Room area is now a state-of-the-art, professional supervisory control and data acquisition facility.



--Submitted by Carmine Goneconte

Wishing Two NBC Employees a Happy Retirement..

NBC staff surprised Principal Environmental Engineer **Terry Cote** and Chief Environmental Engineer **Phil Albert** with a retirement party at Wes' Rib House in Providence on January 6th. Terry has worked for NBC for 25 years and Phil has worked for NBC for 44 years. Both employees will be truly missed, NBC wishes you both a happy and healthy retirement!



Photo Submitted by: Tina Moretti

NBC is in Need of Your Help!

Unfortunately many employees have expressed their concern of the speed of drivers going down Service Road and also drivers not stopping for pedestrians at the crosswalk. We've had quite a few instances where employees have come very close to being hit by a vehicle while trying to cross the street.



This has been an ongoing issue for years. The issue will be on the agenda at the next safety committee meeting. Right now we need to make sure we are all alert when crossing Service Road.

Here's where NBC needs your help! If any vehicle (personal or commercial) is speeding, try to get the license plate number so NBC can report the vehicle to Providence Police. Stay Safe!

Reminder...

NBC safety logo and slogan entries must be submitted by March 1, 2016. Please submit entries to: daucoin@narrabay.com See last months Pipeline; January Pipeline, for further details about the contest.



February EH&S Trainings

Please obtain a supervisor's permission and please register through the new Training Central link on BayNet

- Lockout/Tagout Classroom Training (FP O&M staff): 2/2, 2/4, 2/9, 2/23
- 8 Hr. Hazwoper Refresher Training: 2/10
- CPR/AED & First Aid Certification Training: 2/16

--Submitted by Dave Aucoin



NBC Pipeline

March 2016

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	3	4  Game @ 7:05	5
6  Game @ 3:05	7	8	9 CAC Meeting 12 PM	10	11 Payday	12
13 Daylight Savings Time Begins	14	15 Board of Commissioner's Meeting 11 AM	16	17  St. Patrick's Day	18	19 St. Joseph's Day
20 Palm Sunday	21	22	23	24	25 Good Friday Payday	26
27  Easter	28	29	30	31		

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

News Briefs...

Are You An NBC Customer? Get Your Potable Water Sampled!

In order to satisfy NBC's Rhode Island Pollutant Discharge Elimination System (RIPDES) permit requirements to develop safe limits for pollutants, we need to know the sources of contaminants entering our treatment plants. One such potential source of contaminants is from drinking water supply. Heavy metals may be present in the water originating at its source, or the water may pick up contaminants from the pipes in the distribution system, or even from pipes within your home.



If you live within the NBC's service district and your sanitary water is discharged into the NBC's sewer system, we ask that you volunteer to have your potable water analyzed for heavy metals. It is fast and easy to do. All you have to do is run your cold water tap from your kitchen or bathroom sink for 1 minute in the morning, then fill two sample bottles that we supply to you, repeat the process for the hot water tap, note some simple collection information on the label affixed to your bottles, and bring them to work that same day. We will take it from there and analyze the samples in NBC's state-of-the-art lab for common heavy metal contaminants. We will provide the results to you at a later date.

If you are interested in taking part in this project, please contact **John Motta** at extension **471** or email him. Thank you in advance for taking part in this important study, which will give you and your loved ones peace of mind knowing your drinking water has been tested and hopefully found safe.

--Submitted by John Motta

Upcoming Interdepartmental Data Meeting



NBC's PP&R division regularly hosts monthly informational meetings to allow NBC staff the opportunity to share information about the important projects NBC is working on. The March Project Update presentation will feature NBC's Environmental Scientist Eliza Moore who will present on the subject, entitled "Measuring Water Quality Improvements in Narragansett Bay - What Can We Learn Through

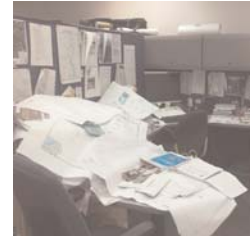
Benthic Video Monitoring??"

This presentation will discuss the benthic video survey initiative that NBC has developed over the last two years and its use in monitoring ecological changes in the Upper Bay resulting from reductions in nitrogen from NBC's treatment plants. Eliza will show a video of benthic life in NBC's receiving waters that been filmed over the last year. The presentation will be held in the main conference room on Thursday, March 31st at 1:30 PM and all staff are invited to attend as long as appropriate approvals are received from your supervisor.

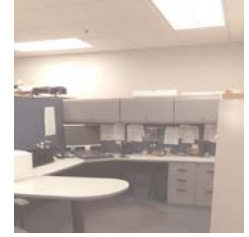
These project information presentations are held on selected months immediately following the 1:00 PM monthly interdepartmental data meeting, which staff are also welcome to attend. PP&R occasionally invite speakers, but also encourage anyone to contact the department to volunteer to speak about the latest happenings regarding your important work. If you would like to present, please contact **John Motta** at extension **471**.

-- Submitted by John Motta

You Know Phil Albert is Gone When His Desk Looks Like This...



Before



After

--Submitted by Tina Moretti

NBC Employees Receive Valuable Safety Training

On February 16th, NBC employees received CPR/AED & Basic First Aid certification training. This voluntary safety training is one of the more important types offered by NBC's Health & Safety Program, as it provides the actual hands-on skills that can be used to potentially save a person's life. There are roughly 220,000 victims of sudden cardiac arrest each year in the U.S. - about 10,000 of which occur in the workplace.

In addition to being able to proficiently administer



First Aid, more NBC employees are now able to:

- Recognize sudden cardiac arrest and notify EMS personnel,
- Perform cardiopulmonary resuscitation (CPR),
- Provide early defibrillation with an AED, and
- Care for the victim until EMS personnel arrive.

The training was once again delivered by CPR & Safety Classes of RI and was well received by all 15 employees in the class. Each employee will receive a certification card from the American Heart Association (AHA), which is valid for 2 years.

March EH&S Trainings will soon be announced in the Training Central portal on BayNet. Please obtain your supervisor's permission prior to enrolling in any safety training class.

-- Submitted by Dave Aucoin



NBC Pipeline

April 2016

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Calendar of Events *for April*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2  Game @ 7:05
3  Game @ 3:05	4	5	6	7	8  Game @ 7:05 Payday	9
10	11	12	13	14	15	16
17	18	19	20 CAC Meeting 12 PM	21	22 Earth Day Passover Begins Payday	23
24	25	26 Board of Commissioner's Meeting 11 AM	27 <i>All meetings are held at the Commission's One Service Road Offices unless otherwise noted.</i>	28	29	30 Passover Ends

News Briefs...

Thinking Green

NBC's Laboratory Green Team has started stretchable plastic and plastic film recycling in addition to styrofoam recycling. Working alongside Dave Aucoin and Rhode Island Resource Recovery, the lab has entered a Trex community challenge to collect, weigh, and recycle stretchable plastics. The Trex company uses the plastic film in their decking product and offers prizes if more than 500 pounds of plastic can be collected. Don't throw your plastic bags in the trash bring them over to the NBC Lab where the special Restore container is located. Many of these Restore containers can be found in most RI retailers.

Examples of what is accepted in Restore containers (remember, all bags should be empty):

- Shopping bags
- Sandwich bags (pull any hard zip pers off first)
- Cereal box liners
- Dry cleaning bags
- Newspaper bags
- Bread/bagel bags
- Produce bags
- Shrink wrap from cases of beverages
- Electronic overwrap
- Paper towel and toilet paper over wrap
- Airpacks (from shipped packages)
- Bubble wrap



-- Submitted by Nora-Jean Lough & Walter Palm

Employee Ticket Special for Ringling Bros. and Barnum & Bailey Circus

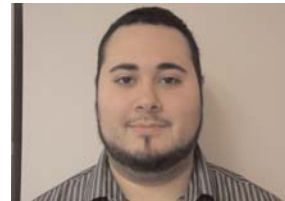
Providence Sports & Entertainment's P-Bruin hockey season is coming to an end but they were kind enough to offer us an awesome discount on the Ringling Bros. and Barnum & Bailey Circus for **Saturday April 30th at 3 PM or Sunday May 1st at 3 PM**. Ticket prices are both the same for adults and children which is \$22.25 per person. The seats will be in the 200 level of the arena and will be based off best availability at the time of the order.

The only difference between this special and the P-Bruins specials throughout the year is that we need a minimum of 10 people or more for the discount between both shows. **Deadline to purchase is Friday April 8th.**

Contact **Talia Girard** by email or x394 if interested.



Welcome...



Andrew Iasimone,
Field's Point
Operator I



Andrea DiCicco,
Pretreatment Clerk



Lisa Bortolotti,
Associate Legal
Counsel

Congratulations...



To Assistant
Pretreatment
Manager
**Nathan
Dean's** son
Cooper for
being a part of
the Bishop

Hendricken team, BHHS Blue, who won the Congressional App Challenge. Cooper did the coding for the app.

The Congressional App Challenge is a competition encouraging high school students to learn how to code by creating their own applications. The challenge highlights computer science and STEM (science, technology, engineering, and math) and encourages students to engage in those fields. With this challenge Congress hopes to shine light on the growing importance of these skills.

Over 17, 000 students signed up to participate in the challenge and the Bishop Hendricken team were the only winners in the state of RI. Congratulations Cooper!

--Submitted by Kerri Brit

Congratulations... (continued)

To IM Operator IV, David Teixeira on the birth of his first grandchild! David's daughter Ashley and her husband Neal welcomed Christian Neal Picard on Good Friday, March 25th at 7:22pm. He was a healthy 9 lb., 2 oz. All are doing well and enjoying their new bundle of joy.



-- Submitted by Meg Goulet

Acknowledgements at March's Board Meeting...

At the March 15th monthly Board meeting Vincent Mesolella and Raymond Marshall took the time to recognize many hardworking employees for the recent awards they have received and congratulated them for their outstanding work.

NBC's Environmental Safety & Technical Assistant Manager, Jim McCaughey accepted the George W. Burke, Jr. Facility Safety Award on behalf of NBC which recognizes excellence and effectiveness in safety programming for municipal and industrial wastewater facilities.



From left to right: Vin Mesolella, Jim McCaughey & Ray Marshall.



From left to right: Vin Mesolella, Nora-Jean Lough & Ray Marshall.

NBC Biologist, Nora-Jean Lough 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. Nora also received the Crystal Crucible Award from the NEWEA Laboratory Practices Committee. The Crystal Crucible Award is a recognition of the outstanding work, community service, and positive contributions to the wastewater laboratory field within New England.

NBC Finance staff was presented with 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, 2015.



From left to right: Karen Giebink, Alice Marchessault, Vin Mesolella, Gail Degan & Ray Marshall.

A Baby Shower for Pam

Some of the women of NBC were kind enough to throw Environmental Scientist, Pam Reistma a baby shower during lunch break on March 30th. Pam was so surprised and overwhelmed! Thank you Kim Kirwan, Jo-Ann Ragosta & Emily Petteruti for all the planning and to all those who attended making Pam and baby Reitsma feel so special!



April is Distracted Driving Awareness Month



According to the National Highway Traffic Administration, over 37,000 people die in motor vehicle crashes every year. That equates to an alarming 101 deaths per day. An

additional 2.35 million people become injured or disabled each year due to motor vehicle crashes. As technology develops and drivers become less focused on the task of driving, distracted driving has emerged as one of the leading causes of motor vehicle accidents in the U.S.

In its continuous attempt to try to curb these rattling statistics, the National Safety Council designates the month of April each year as Distracted Driving Awareness Month. One out of every five motor vehicle crashes involve cell phone use. Cell phone use while driving isn't just a manual and visual distraction, but also has a major impact on the driver's cognitive ability to fully recognize the surrounding traffic environment.

NBC employees are reminded that although Rhode Island does not currently ban cell phone use while driving, texting while driving is prohibited. Employees are encouraged to review the guidelines for vehicle cell phone usage at NBC, as outlined in NBC's Policy on Vehicle Safety Procedures. In order to learn just how distracting the use of cell phones and even hands-free devices impair one's ability to focus on the road, NBC employees are encouraged to take a brief 10-minute training through NBC's Online University entitled "Hang Up & Drive: Cell Phones & Driving"

April EH&S Trainings will soon be announced in the Training Central portal on BayNet. Please obtain your supervisor's permission prior to enrolling in any safety training class.

-- Submitted by Dave Aucoin



NBC Pipeline

May 2016

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Calendar of Events *for May*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
					Payday	
8  Mother's Day	9	10	11	12	13	14
15	16	17	18 Goodwill Recycling Event 7:30-9:30 AM CAC Meeting 12 PM	19	20 NBC's Watershed Explorers Conference Payday	21
22	23	24 Board of Commissioner's Meeting 11 AM	25	26	27	28
29	30  Memorial Day HOLIDAY	31	<i>All meetings are held at the Commission's One Service Road Offices unless otherwise noted.</i>			

News Briefs...

Happy Anniversary Field's Point

May 2nd, 2016 marked 34 years of NBC ownership of the Field's Point WWTF. Prior to NBC owning the facility it was owned by the city of Providence. Conditions at the facility during the City of Providence ownership degraded dramatically; since then, the NBC has upgraded the plant to a world class facility. Lab Tech **Ralph Ruggiano** and Operations Manager **Carmine Goneconte** are the only two current working employees left that worked for the facility when it was owned by the city. After being one of the worst polluters in New England we are now one of the BEST facilities in the country! Happyanniversary Field's Point!



NBC's Watershed Explorers Look for Macroinvertebrates



The year has flown by! NBC's Watershed Explorers program is coming to its year end with the conference on May 20th at Goddard Park. Students are participating in their final field trip before the conference searching for macroinvertebrates in local bodies of water to determine the quality of the water. In the photo to the left, students from St. Cecilia's School found a HUGE crayfish at Slater Park!

Congratulations...



To Environmental Scientist, **Pam Reitsma** and her husband Josh on the birth of their beautiful baby boy, Wesley Victor Reitsma. Wesley was born on April 9th. Mom, Dad & baby Wesley are doing very well!

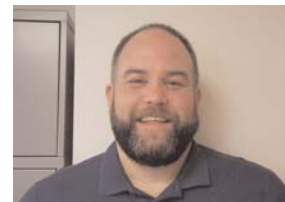
Welcome...



Terri Breedon,
Environmental Data
Analyst



Sean O'Keefe,
Field's Point
Operator I



Brendon McLean,
Senior Systems
Administrator

Goodwill E-Waste Recycling Event



NBC's next Goodwill E-Waste Recycling Event is scheduled for Wednesday, May 18th from 7:30 - 9:30 AM. In the COB parking lot.

List of acceptable items: TVs (accepted with a \$10 donation), computers, laptops, flat screen monitors, peripherals, audio equipment, video equipment, electronics, toner/printer cartridges, file cabinets, metal shelving, small household appliances, clothing & accessories (shoes, belts, etc.), textiles (Bedding, linens, towels, etc.) & small toys.

NOT acceptable: desk top printers, CRT Monitors, florescent bulbs & single use Alkaline Batteries.

2016 Environmental Merit Awards Breakfast

On April 5th, NBC held its twenty-first annual Environmental Merit Awards ceremony at Kirkbrae Country Club. Each year NBC recognizes those companies among its 1500 permitted users who have achieved perfect regulatory compliance and outstanding pollution prevention in the previous year. Guest Speaker, General Treasurer Seth Magaziner, an advocate for the economy and the environment spoke to guests about RI's natural resources and RI's Infrastructure Bank.

NBC has one of the most successful pretreatment programs in the country. Kerry Brit, NBC's Pretreatment Manager, and her entire staff are repeatedly recognized for their excellence and expertise. This year NBC awarded nineteen companies for achieving perfect compliance with their NBC permits.

The companies in perfect compliance include: A Harrison & Company, Inc., Darlene Group, Inc., Dominion Energy Manchester Street, Inc., Electrolizing, Inc., Godfrey & Wing, Inc. dba Impco, Inc., Hord Crystal Corporation, Induplate, LLC, Interplex Engineered Products, Inc., John H. Collins & Sons Company, Metallurgical Solutions,



From left to right: NBC Chairman Vincent Mesolella, Miss RI's Outstanding Teen 2015 Catarina Girardi, Miss RI Alexandra Curtis & RI General Treasurer Seth Magaziner.

Inc., Narragansett Jewelry dba C&J Jewelry Company, Pawtucket Power Associates, Providence Metallizing Company, Inc., Stackbin Corporation, Taury Industries, PVD, Inc., Technodic, Inc., Tiffany and Company, Truex, Inc. and Univar USA, Inc.

NBC instituted a Stormwater Management Award in 2007 to recognize those companies, organizations or individuals that successfully use Best Management Practices to minimize stormwater impacts on the NBC sewer collections system. This year's Stormwater Management award goes to The Foundary Associates, Inc.

NBC also announced the grantees for the 2016 Earth Day River Clean Up Grant Program. This program helps clean up the Woonasquatucket River and other local bodies of water. Hundreds of volunteers from different organizations gather to remove thousands of pounds of tires and debris from the beds and banks of the rivers, ponds and shorelines of Rhode Island during these annual Earth Day clean ups.



From left to right: RI General Treasurer Seth Magaziner and NBC Chairman Vincent Mesolella

Farm Fresh Veggie Boxes are Back!



For the past three years, the NBC has participated in the Vegetable Box Program from Farm Fresh RI. If you are interested in taking part this year, the cost is \$25 every two weeks plus a once-yearly fee of \$6.

Click for more details:

- Website
- Facebook page

Farm Fresh RI will accommodate your vacation plans by skipping delivery if necessary; and you can opt out at any time. We do need a minimum of 10 participants to take part.

If you are interested, please contact **Jamie Samons at ext. 377** by Friday May 6th.

NBC Receives Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) has 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 14 consecutive years.

At the April monthly Board of Commissioners Meeting on April 26th Executive Director Ray Marshall and Chairman Vincent Mesolella presented this certificate to NBC Accounting staff that work together to receive this certificate of achievement for NBC. Congratulations Leah Foster, Cheryl Pescarino, Jaqueline Giroux and Renee Rinaldi-Patterson!







NBC Pipeline

June 2016

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Calendar of Events *for June*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
					Payday	
5	6	7	8	9	10	11
				Staff Meetings @ COB 9:30 & 11 AM		
				Poster Contest & Science Fair Awards 5:30 PM		
12	13	14	15	16	17	18
						
		Flag Day	CAC Meeting 12 PM		Payday	
19	20	21	22	23	24	25
		Fitness Challenge logs due today!				
Father's Day	First Day of Summer	Board of Commissioner's Meeting 11 AM				
26	27	28	29	30		

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

News Briefs...

NBC Watershed Explorers Celebrate Another Year

On Friday, May 20th 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 Watershed Explorers environmental education program.

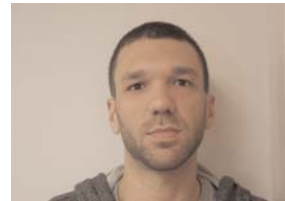
The program encourages students and teachers to become stewards of the environment focusing on their local watershed and other surrounding water bodies. Students from Sarah Dyer Barnes Elementary in Johnston, Anna McCabe Elementary in Smithfield, Ashton Elementary in Cumberland, Kent Heights Elementary in East

Providence, Agnes Little Elementary and St. Cecilia's in Pawtucket, Paul Cuffee and Meeting Street in Providence and Centredale Elementary in North Providence, participated in the NBC Watershed Explorers Program this year and attended the conference at Goddard Park.



The students began the day presenting their macro invertebrate projects and two student essays, followed by educational activities presented by NBC staff, Biomes Marine Biology Center, Roger Williams Park Zoo, and New England Aquarium. The goal is to help students understand the connection between the health of their local watersheds and Narragansett Bay and to keep these precious resources healthy for the future generations.

Welcome...



Joseph LoBello, BP Operator I



Christine Walaska, Customer Service Representative



Russel McGinnis, Environmental Engineer

Shoutout...

To NBC's Permits & Planning Manager, John Zuba for being an excellent mentor to intern Christine Li, a student from St. Mary Academy - Bay View. Christine stressed in her thank you letter how much she enjoyed working with such a great team of people. During her time here she worked with different scientists at NBC to expand her knowledge on water quality. John also made it a point to expose her to other departments throughout NBC to see how the different fields of work at NBC all connect. Best of luck to Christine!



June is National Safety Month

NATIONAL SAFETY MONTH 2016

The National Safety Council (NSC) annually designates the month of June as National Safety Month. With a primary focus on

reducing leading causes of injuries and fatalities at work and at home, the NSC continually strives to promote the fact that *safety is no accident*: everyone is empowered to make safe decisions for themselves and their loved ones. Whether it's obeying the speed limit at work or choosing alternatives to prescription painkillers at home, we all have a responsibility to act safely.

Throughout June, all NBC employees are encouraged to keep an eye out for promotional materials that will be provided to each section. Each week will focus on a different safety topic:

Week 1: Stand Ready to Respond

Week 2: Be Healthy

Week 3: Watch Out for Dangers

Week 4: Share Roads Safely

The following EH&S Trainings will be offered in June and have been announced in the Training Central portal on BayNet. Please obtain your supervisor's permission prior to enrolling in any safety training class:

New Employee OSHA Safety Training - June 2nd

-- Submitted by Dave Aucoin

NBC Hosts Lab Practices Specialty Conference for NEWEA

NBC Hosted a Lab Practices Specialty Conference for NEWEA on Tuesday May 3rd. The Lab Practices Specialty Conference focused on Laboratory Information Management Systems and looked at the chal-



NBC Lab Manager Walter Palm & NBC Biologist Nora-Jean Lough with NEWEA staff.

lenges and success for the software through real-case use.

Safety Slogan/Logo Contest Update

In early 2016, NBC launched a company-wide "Employee Safety Awareness Program." The goal of the program is to promote employee awareness of and involvement in safety-related activities, such as hazard identification and correction throughout the course of daily work activities at NBC. To jumpstart the Program, a safety slogan and logo contest was held among all NBC employees. Several posters were submitted by NBC employees.

NBC would like to acknowledge and thank the following employees and sections for their poster submittals, which will soon be made available for display in each applicable section:

- Tricia Fabrizio - IM
- Rick Zannelli - Customer Service
- Paul Desrosiers - Field's Point Operations
- Interceptor Maintenance Section

Introducing NBC's New Safety Logo!

NBC has a new safety logo! Keep your eyes open for the new image which incorporates the international symbol of the green cross for safety, the NBC logo, and the motto WORK SAFE, BE SAFE; it will be utilized throughout NBC to promote safety awareness.



-- Submitted by Dave Aucoin

Be a Good Neighbor this Summer

As summer approaches, many of us turn our attention to vacation and having fun. It's also a great time to focus our attention on those organizations in our community who provide help to others. If you are a participant in the NBC Casual Day Fund, we'd love to have your suggestions for 501(c)3 organizations* who

could use our support! Submit your request, including documentation of the organization's tax exempt status, to any of the members of the Casual Day Fund Committee (Jamie Samons, Leah Foster, Kimberly Kirwan, Claudette Kalf, Jacqueline Giroux, Patricia Pinilla, Renee Patterson, Lori Vernon).

* Schools, religious, and political organizations do not apply.



NBC Plants Meeting Latest OSHA Deadline

In 2012, the Occupational Safety and Health Administration (OSHA) updated its Hazard Communication Standard (HazCom),



which is one of its most important and most cited standards. Through adopting what is known as the United Nations Globally Harmonized System for Classification & Labelling of Hazardous Chemicals (GHS), OSHA has enacted stricter requirements for employers that store and use hazardous chemicals. These requirements align with worldwide GHS requirements and include the placement of unique hazard 'pictograms' on hazardous chemical storage tanks, in addition to providing employees with new, standardized Safety Data Sheets (SDS) for every hazardous chemical in the workplace. Employee training, the updating of its in-house written HazCom program, and accurate labeling of all hazardous chemical storage tanks and containers has been completed by NBC staff, ahead of the June 1, 2016 OSHA deadline. Congratulations to staff on meeting this important compliance deadline!

-- Submitted by Dave Aucoin

Reminder...

For those who are participating in the 2016 NBC Spring Fitness Challenge the second session will be ending on **June 21st**. All logs for the second session must be in by that date. Those individuals

who complete this program will receive the \$100.00 wellness reimbursement as noted in the Narragansett Bay Commission Wellness Incentive.



NBC Maintenance Manager Joins NEWEA Executive Committee



NBC Maintenance Manager Michael Spring is one of twenty-one water professionals on the New England Water Environment Association (NEWEA) Executive Committee, which is a huge honor. Mike has been on the Executive Committee since 2015 and is also on the board of the Narragansett Water Pollution Control Association (NWPCA). Through connections with the NWPCA and Janine Burke-Wells, (the previous

director of NWPCA and current Executive Director of the Warwick Sewer Authority) Mike was asked to join the NEWEA Executive Committee.

The NEWEA's Executive Committees goal is to stimulate interest and active participation in the association and its activities and supervises association committee's activities. The committee also manages the affairs and conducts all business relative to the operation and well-being of the association.

As a member of the committee Mike along with the twenty other water professionals are required to be involved in the wastewater industry. Members are asked to report back to NEWEA on what the state is currently doing: i.e. infrastructure, WWTF, fundraisers, motivating other professionals, etc. NEWEA's annual conference is held every January in Boston and there are other smaller meetings throughout the year that members are required to attend and participate.

"There are many benefits and challenges with being a part of the Executive Committee", Mike stated. "Meeting lots of different people from different companies and organizations can be intimidating when you're shy like I am, but everyone I've met so far along the way has been very accepting and you

learn a lot from others in the industry". They are able to share ideas on projects and what they're doing to strive in the wastewater industry. Another challenge overall in the wastewater industry is not having the funds needed on projects. It's a very costly industry. We at NBC are very lucky, NBC is very advanced compared to other facilities and have been able to do the necessary upgrades unlike others.

Congratulations Mike, what an honor!






NBC Pipeline

July 2016

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 July*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
					Payday	
3	4	5	6	7	8	9
	 Independence Day					
10	11	12	13	14	15	16
					Deadline for summer tuition reimbursement applications!	
					Payday	
17	18	19	20	21	22	23
24	25	26	27	28	29	30
					Payday	
31						

News Briefs...

NBC Awards Poster Contest and Science Fair Winners at its Annual Gallery Night

On Thursday, June 9th, NBC awarded many talented young artists and scientists at NBC's 23rd annual Poster Contest & Science Fair Awards Ceremony. This year's poster theme was "Where there is Water there is Science." This theme was chosen in honor of NBC's new Water Quality Science Building that just opened in June (see below). Students were asked to artistically showcase what the science of water means to them.



Environmental Education Coordinator Cynthia Morissette with Science Fair winner Carly McNulty.



Environmental Education Coordinator Cynthia Morissette with Poster Contest winner Giuseppe Cucinotta.

Science Fair projects were judged at the RI State Science Fair for excellence in water quality investigation. Students gathered with family and friends in the Education Room at the Field's Point Administration Building where the students' art work was displayed around the room for all to see. Jamie Samons, Public Affairs Manager, presented this year's science fair winners and poster contest winners with award certificates and a check from NBC for their excellent work. Those whose posters were chosen will be featured in the 2017 NBC calendar coming out in December.

NBC Dedicates New Water Quality Science Building to the Late Commissioner Leonard Walker

On Tuesday June 21st NBC dedicated the new Water Quality Science Building to former Commissioner Leonard E. Walker, Sr. who was on the Board of Commissioners from 1993 until his death in 2003.

The new state-of-the-art building houses the most advanced laboratory technology in Southern New England and features technology only found in a handful of labs across the country.



Along with NBC staff and NBC's Board of Commissioners, NBC welcomed Leonard E. Walker's family to join NBC for the ribbon cutting ceremony, who were very honored to be able celebrate this special day.

Welcome...



Elizabeth Medeiros, Laboratory Technician



Julia Suits, Summer Lab Intern

Congratulations...

To Senior Fiscal Clerk **Jean Barnes** on the birth of her fourth grandchild! Jean's daughter Tiffany gave birth to a beautiful baby boy, Richard G. Barth III on June 10th. Weighing 8 lbs 4 oz.



To IM Inspector **Anthony Ciccirelli's** son Ethan on graduating from the Smithfield Drug Abuse Resistance Education (D.A.R.E.) program on June 9th. The D.A.R.E. Elementary School Program teaches students about the harmful effects of alcohol, drug abuse, bullying and increases their self-esteem by showing positive alternatives of ways to say no to alcohol, drugs and violence.



Ethan Ciccirelli with Smithfield Police officer Gary Masterson.

Water, Rest and Shade



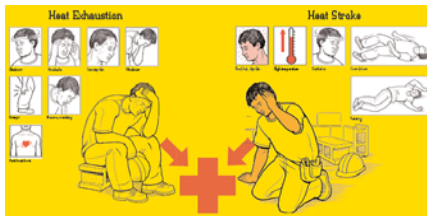
As the summer temperatures continue to climb, it is important for all NBC employees to be able to recognize the health effects of heat on the body in order to react appropriately. It is common knowledge that the body normally cools itself by sweating, but during hot, humid weather, sweating is simply not enough. This is the main reason why

OSHA has once again launched its annual “Water. Rest. Shade.” campaign to raise awareness about heat-related illnesses in the workplace. Body temperature can rise to dangerous levels if employees don’t consume enough water. Scheduled rest periods and adequate amounts of shade can also aide in stabilizing body temperature.

Any employee who is exposed to hot and humid conditions is at risk of heat illness, especially those who may wear bulky personal protective equipment (PPE) or operate heavy equipment. Likewise, some employees may be at greater risk than others if they have yet to build up a tolerance to hot conditions. This could include new employees, temporary employees, or employees returning to work after a long vacation.

Here are some helpful tips that all NBC employees should follow to help prevent the onset of heat related illness:

- Drink water every 15 minutes, even if you are not thirsty.
- Rest in the shade to cool down.
- Wear a hat and light-colored clothing.
- Learn the signs of heat illness and what to do in an emergency.
- Keep an eye on fellow workers. If you suspect or notice a co-worker is suffering from a heat related illness, *immediately notify your supervisor and call 911*. Stay with the victim until help arrives; move to the shade, loosen clothing, place ice packs in the groin area and under the arm pits, and slowly provide water **ONLY** if the victim is not vomiting.



All NBC employees are encouraged to complete a new course that is now available on NBC’s Online University entitled “Working Outdoors in Warm Weather.” The course focuses on

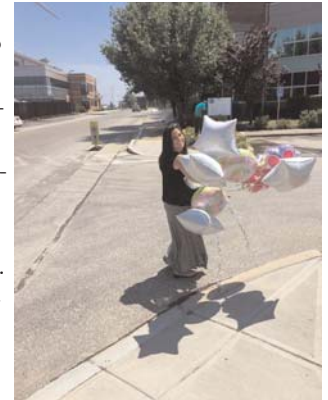
how to recognize and prevent common seasonal problems such as heat, tick-borne diseases, West Nile virus and poisonous plants. As always, please obtain your supervisor’s permission prior to registering for any NBC safety training.

--Submitted by Dave Ancoin



A Baby Shower for Junel...

Some of the ladies of NBC got together on Wednesday June 29th to throw NBC’s Executive Paralegal **Junel Grande** a surprise baby shower during lunch break. Thank you to all the ladies that attended and a special thanks to those who put in all the hard work planning, decoarting and making it a special day for Junel. Junel is due in August and is expecting a baby girl.



NBC Staff Wins First Place Overall at NEWEA & NYWEA Spring Meeting

RI’s wastewater team came in first place overall and won five other awards at the NEWEA and NYWEA Spring Meeting and Operations Challenge in Mystic Connecticut on June 5th. The competition tests for strength, speed and endurance designed to test the knowledge and skills used in wastewater collection practices and repairs.

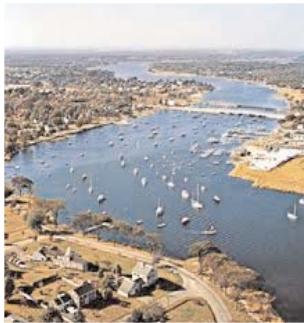
Three out of five men on the team are NBC employees. Team members consisted of Mike Spring who was their coach, Vinny Russo as Captain, and Ed Davies. Ryan Patnode and Sam Sullivan were from the West Warwick facility.

The competition included proficiency testing in water purification process-control strategies, laboratory skills, a fast-paced safety rescue simulation, emergency repairs of a complex pump, and a high-speed sewer-line repair using all the physical and mental skills used daily by wastewater treatment professionals. With these results, the team will be to compete in the National Operations Challenge event at the Water Environment Federation (WEFtec) conference in New Orleans September 24th-28th. Congratulations team!



Cleanest in 150 years

Narragansett Bay was featured in a recent article on the Rhode Island Sea Grant website. The article highlights that Narragansett Bay has been the cleanest it's been in 150 years. Narragansett Bay has come a long way from once being a dumping spot for toxic chemicals and metals, sewage and many other pollutants to now being highly regulated thanks to the Clean Water Act and RI's Department of Environmental Management. Along with these regulations wastewater treatment facilities like NBC have been upgrading their facilities to reduce the nitrogen input into Narragansett Bay and have by 65 percent which has had a huge impact on keeping the Bay clean. Although the Bay is cleaner, Scientists still have not seen the result of more fish in the cleaner waters. Scientists are doing research and watching for trends to see why this is the case but the Bay is cleaner thanks to all those who've worked together to make it possible. Click the link to see the full article <http://seagrants.gso.uri.edu/narragansett-bay-cleaner-than-its-been-in-150-years/>



For All NBC Food Lovers...

For the past three years, NBC has participated in the Vegetable Box Program from Farm Fresh RI. It is a bi-weekly program that delivers fresh local produce to NBC for those who participate. We asked that you send us photos of some of the dishes you've made with the produce you've received, let's keep these photos and recipes (if you don't mind sharing) coming! Send them over to Jamie Samons or Talia Girard to be featured in next months pipeline.

NBC's Senior Systems Development Programmer **Domingo Duran** threw together what he had on hand and came up with pork, asian noodles, fennel stalk, and cilantro soup using the fennel and cilantro from the Veggie Box.



NBC Environmental Scientist **Eliza Moore** made Mushrooms and greens with Fontina and toast with her kale and arugula from her Veggie Box. She also made a Grilled Ginger Sesame Chicken Chopped Salad using the Napa cabbage, scallions and radishes from the Veggie Box. Eliza included the recipes incase anyone is interested in making these dishes. Photos and recipes to the top right.

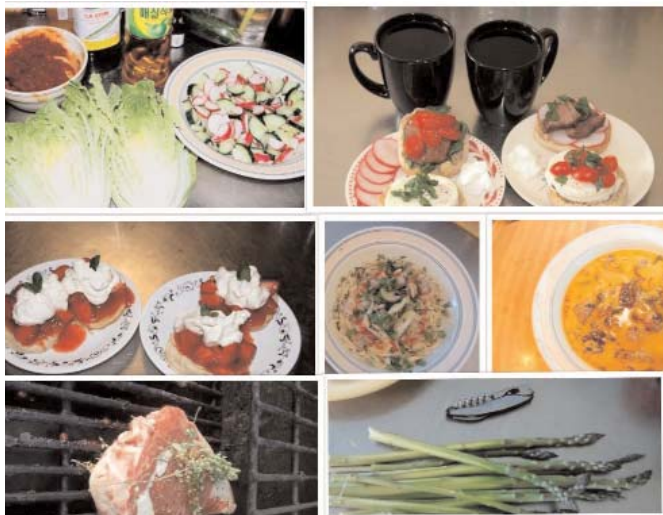


<http://smit-tenkitchen.com/blog/2015/05/mushrooms-and-greens-with-toast/>



NBC's Maintenance Manager **Mike Spring** has really made good use of his Veggie Box! He used the arugula, scallions and radishes from the Veggie Box on his breakfast sandwiches. The thyme from the Box in marinades and on grilled chicken and steaks. Mike grilled asparagus from the Veggie Box and golden oyster mushrooms as a side dish for steaks. He used the Bok Choy in salads and cilantro and scallions for pasta and littlenecks with white beans, lime, olive oil and chardonnay. Mike made a Red Russian Kale Soup with the Kale from the Veggie Box with Italian sausage, white beans and crushed red pepper. Lastly for a dessert Mike made strawberries and rhubarb sauce with the rhubarb from the Veggie Box to put over homemade buttermilk baskets and whipped cream.

<http://www.cookingclassy.com/2014/05/grilled-ginger-sesame-chicken-chopped-salad/>





NBC Pipeline

August 2016

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Calendar of Events *for August*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
	Victory Day HOLIDAY				Payday	
14	15	16	17	18	19	20
		Blood Drive 9 AM - 1 PM COB				
21	22	23	24	25	26	27
					Payday	
28	29	30	31			
Lucy Webb Hayes Birthday! (see Fun Fact below)						

Fun Fact:



Lucy Webb Hayes was born on August 28, 1831. She was the wife of President Rutherford B. Hayes, who installed the first flush toilet in the White House!

News Briefs...

NBC Executive Director Ray Marshall Elected President of NACWA

NBC Executive Director Ray Marshall has been elected President of the National Association of Clean Water Agencies (NACWA) by the NACWA Board of Directors on July 12th. NACWA represents more than 300 publicly owned treatment works across the country which treats more than 20 billion gallons of wastewater each day and services the majority of the U.S. sewer population.



On Wednesday August 3rd NBC staff surprised Ray with a congratulatory cake to celebrate his accomplishment. As President of NACWA Ray will help maintain the organization's strategic position in driving national clean water policy, working closely with federal regulatory agencies in the implementation of environmental programs. Ray will continue to lobby Congress for increased federal funding for important wastewater infrastructure projects, such as the NBC's federally mandated CSO project.



Congratulations Ray!

Marc Pariseault Reunites Tinkerbell with her Owners



Bucklin Point's Assistant Operations Manager, Marc Pariseault made one Rhode Island family very happy July 23rd. While Marc was enjoying the day at a family member's pool this beautiful green colored parakeet you see pictured landed on his finger. Marc knew this wasn't your average local wild bird, it had to be someone's pet.

The bird's name is Tinkerbell and had been lost for two days at the time. An ad was placed through www.helpinglostpets.com to help find Tinkerbell and the organization networks with others to help these families with finding their lost pets. Marc just so happened to contact the right people and get the word out there that he had someone's bird. The family was notified that Tinkerbell was safe and sound with another family (Marc's) waiting to be taken home, they were so grateful and thrilled to hear the good news. RI lost pets is an amazing group and Tinkerbell and family are very lucky! Keep them in mind if you are ever in this situation! Great job, Marc!

Welcome...



Joseph Devitt, Field's Point Operator I

Mark Your Calendars...



NBC's next RIBC Blood Drive will be held in the NBC Main Conference room on Tuesday, August 16th from 9 AM - 1 PM.

Make an Appointment: [Click here](#)



Flu Shot Clinics will be held at Field's Point, Bucklin Point and the COB on September 29th.

More details coming soon.....

It's that Time of Year Again...

The P-Bruins will be working with us again to give us special group offers and great lower level seats on upcoming games throughout the year. Our first group offer is for opening weekend in October and there are 2 games to choose from...



Games are on **Friday, October 14th at 7:05 PM** and **Sunday, October 16th at 3:05 PM**. Tickets are just \$20 per person. Tickets include a hot dog and soda OR draft for those of you 21+ AND a \$5 Dunkin Donuts Gift Card.

Deadline to purchase is Friday, September 9th. Please email or call Talia Girard at ext. 394 on or before the 9th to purchase.



NBC Pipeline

September 2016

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Calendar of Events *for September*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5  Labor Day HOLIDAY	6	7	8	9 Deadline to purchase P-Bruins tickets! Payday	10
11 Patriot Day	12 Deadline for tuition reimbursement!	13	14 CAC Meeting 12 PM	15	16	17
18	19	20 Board of Commissioner's Meeting 11 AM	21	22  First Day of Autumn	23 Payday	24
25	26	27	28	29 Flu shot clinic for COB, FP & BP	30	
<i>All meetings are held at the Commission's One Service Road Offices unless otherwise noted.</i>						

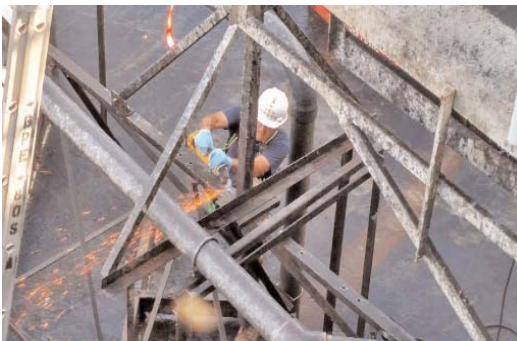
Fall Tuition Reimbursement for Local 1033, Council 94 and Non-Union Employees

Applications for tuition reimbursement for the upcoming Fall Session must be submitted to Joanne Maceroni by **Monday, September 12th**. Each application must be accompanied by a short course description taken from the college catalog. Blank application forms may be obtained from the Human Resources Office or by going on Baynet to General Information, Benefits, Tuition Reimbursement Programs. If you have any questions about the program, you may contact **Joanne, at extension 327**.

News Briefs...

BP Works on Preventative Maintenance Tasks on the Final Clarifiers

The Maintenance Section at Bucklin Point began the long-awaited project of performing preventative maintenance tasks on the Final Clarifiers in August. In order to safely enter the tank following OSHA guidelines they had to rent a crane and a personnel cage to lower the mechanics into the tank. Pictured in the top right photo is BP Mechanic II, Tim Henshaw and Michael D'Arezzo as they evaluate the condition of the scraper mechanism on the No. 6 Final Clarifier. The second photo (bottom right) is of Tim Henshaw grinding down the scraper mechanism. The work proceeded smoothly due to proper planning between Operations and Maintenance as the mechanics completed all their assignments in a timely fashion.



--Submitted by Carmine Goneconte

For all NBC Food Lovers...

For the past three years, NBC has participated in the Vegetable Box Program from Farm Fresh RI. It is a bi-weekly program that delivers fresh local produce to NBC for those who participate.

NBC Environmental Scientist Eliza Moore made a tomato cobbler with cheddar and herb biscuits (top right photo).



She used the tomatoes, thyme, garlic, and onion from her recent veggie box. The second photo (bottom left) is of another dish Eliza made. Eliza made a tomatillo salsa to go on chicken tacos and black beans using the fresh tomatillos, onions, and garlic from the veggie box. In the tacos Eliza used thyme, lettuce and tomatoes from the veggie box as well.

Thanks for sharing Eliza!



Reminder...

Friday September 9th is the last day to purchase tickets for the P-Bruins opening weekend. Games are on Friday, October 14th at 7:05 PM and Sunday, October 16th at 3:05 PM.



Tickets are just \$20 per person. Tickets include a hot dog and soda OR draft for those of you 21+ AND a \$5 Dunkin Donuts Gift Card.

Please email or call **Talia Girard** at ext. 394 to purchase.

Congratulations...

To Executive Paralegal, **Junel Grande** and her husband David on the birth of their beautiful baby girl, Vivienne Reese born on August 23rd weighing 8 lbs 3 ounces and 20 inches long.



DEM Staff Very Impressed with FP Visit

On Friday August 5th, Dave Borkman of RI's Department of Environmental Management's (DEM) shellfishing program and few of DEM's interns visited the Field's Point Waste Water Treatment



Facility. Guests were greatly impressed with the staff and how the facility operates. Bill Patenaude, DEM's Principal Engineer wanted to relay the message and give a special shout out to Mark Brasil, Mechanic II, "Mark is a great ambassador for your facility", Bill stated. The group ran into Mark along the tour and were very surprised to hear such enthusiasm about the facility. Keep up the good work Field's Point!

NBC Hosts Project Wild Training

On August 17th, NBC's Environmental Education Coordinator Cynthia Morissette hosted a Project WILD and Aquatic WILD Training for 18 educators servicing 6 different school communities in the state of RI, many included teachers who participate in the NBC Watershed Explorers Program.

Project WILD is a wildlife focused conservation education program for grades K-12 educators and their students. Their mission is to develop awareness, knowledge, skills and commitment and provide wildlife-based conservation and environmental education that fosters responsible action toward wildlife and related natural resources. Overall 1 million educators in the U.S. have participated in Project Wild workshops since the program began. These educators in turn have provided instruction using Project WILD to more than 48 million youths. Project WILD and Aquatic WILD attempt to teach children "how to think, not what to think." The curriculum provides children with information that they can then use to make their own educated choices about caring for and living within the natural world.

Educators learned how the program works and were split into groups to work on one of many Project WILD/Aquatic WILD activities to teach to the rest of the group. One activity called Water Works asks for students to create a "water web" to illustrate the interdependence among water users and producers. All activities are hands-on and many provide an outdoor component that encourage teachers to take their students outside the classroom for an even more in-depth learning experience.

As part of the training, teachers were also provided a tour of the NBC's new Water Quality Sciences Building and were dazzled by the knowledge and work of Nora Lough, NBC's Biologist. Many thanks to both Nora and Walter Palm, NBC's Lab Manager, for allowing the teachers to visit the new building and for providing them with such a fantastic experience.

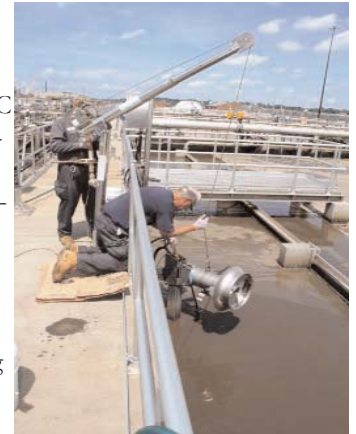


Project WILD's Water Works Activity.



NBC's IFAS System is the Largest in the World

NBC's Field's Point WWTF operates the largest Integrated Fixed-Film Activated Sludge (IFAS) System in the world. NBC is required to remove total nitrogen to 5 mg/L from May to October and chose the IFAS system as the solution to this requirement. The IFAS system requires upkeep and NBC's Maintenance department has been working hard on inspecting the mixers within the past month. NBC Maintenance is required to inspect the 120 mixers every six months to make



From left to right: Joe Crosby and Glenn Peterson

sure we are complying with regulations. NBC's Mechanic II's Joe Crosby and Glenn Peterson have been working hard, hoisting up each mixer, draining the oil and making sure there is no contamination, if there is the parts get



sent out for service. Each mixer takes about a half hour to inspect. Maintenance Manager Mike Spring said that each mixer so far has been in great condition during the latest inspection.

NBC Chairman Breaks Ground with Elected Officials for New Citizens Bank Campus

Citizens Bank announced in March 2016 that they would build a 420,000 square-foot campus in Johnston following the news that their lease is set to expire in 2018 at the Sockanosset Cross Road location in Cranston.

Along with the decision to build they are in agreement with NBC to extend the nearby sewer line. On August 31st, NBC Chairman Vincent Mesoellela joined many RI elected officials to break ground on this exciting project. Completion of the new Citizens Bank Campus is set for 2018.






NBC Pipeline

October 2016

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Calendar of Events *for October*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
Rosh Hashanah					Payday	
9	10	11	12	13	14	15
	Columbus Day HOLIDAY	Yom Kippur			 P-Bruins Game @ 7:05	
16	17	18	19	20	21	22
 P-Bruins Game @ 3:05			Smoothie Demo 11:30 AM - 12:30 PM FP Lunchroom		STEM Career Day 9AM - 12 PM Payday	
23	24	25	26	27	28	29
			NBC Pumpkin Decorating Contest 11:30 AM - FP Edu. Room CAC Meeting 12 PM			
30	31					
	 Halloween					

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

News Briefs...

NBC Hosts Safety Association of RI Meeting

Since 2009, NBC has been an active member of and contributor to the Safety Association of RI (SARI). SARI membership is comprised of members from Rhode Island and nearby Massachusetts and Connecticut, and includes a diverse group of safety, health and environmental professionals who share their insights and experiences with fellow members.



On September 15th, NBC hosted the quarterly SARI meeting, during which the Beacon Mutual Insurance Co. delivered a presentation on Behavioral Based Safety. Behavioral safety is the application of psychological research on human behavior to the problems of safety in the workplace. Studies indicate that 96 percent of all workplace accidents are triggered by unsafe behavior. NBC's Loss Prevention Representative, Guy Lanzi, delivered the training which was well received by more than 25 attendees. NBC is the host facility for all SARI meetings in 2017. If anyone would like more information on SARI, including membership, please contact Dave Aucoin at ext. 418.

-- Submitted by Dave Aucoin

Fire Prevention Week: October 9th - 15th

Every year, the National Fire Protection Association (NFPA) designates the week of October 9th - 15th as Fire Prevention Week. NFPA's goal is to increase awareness at home and within the workplace on the prevention of situations that may cause a fire. In addition to general everyday good housekeeping, here are some helpful tips on smoke alarms that all NBC employees should know:

- Smoke alarms should be installed on every floor in a house, in addition to inside every bedroom,
- Smoke alarms should be replaced every 10 years and the batteries should be replaced twice/year,
- Working smoke alarms can double your chances of survival in a fire

October EH&S Trainings (obtain supervisor's permission prior to attending any safety training class):

- Baseline & Annual Audiograms/Hearing Conservation Training: 10/18 & 10/19
- 40 Hr. Hazwoper Training (applicable employees): 10/4 - 10/6, 10/11 - 10/12.

-- Submitted by Dave Aucoin



Welcome...



Jae Pezzullo, Fiscal Clerk Accounting

Mark your Calendars...

Join us on Wednesday October 19th from 11:30-12:30 in the Field's Point lunchroom where a representative from United Healthcare will host a demonstration on how to make healthy smoothies. Smoothies can provide a healthy breakfast or snack if they are packed with minerals, vitamins and antioxidants.



Please call **Kristen Petit** at ext. 371 to sign up.

Join us Wednesday October 26th for our Annual NBC Pumpkin Decorating Contest. Each section must decorate or carve a pumpkin for the contest. We will use the same voting method we had last year seeing as though some departments are much larger than others, so to be fair you will not be allowed to vote for your own pumpkin.



Along with decorating a pumpkin, please bring in a small snack or treat to share during the contest.

Along with decorating a pumpkin, please bring in a small snack or treat to share during the contest.

Contest Details:

*Education Room at FP Administration Building
Wednesday, October 26th
11:30 AM.*

Please pick up your pumpkins and anything else you may have left by 2 PM.

Contact **Talia Girard** at ext. 394 if you have any questions.

Congratulations...

To the graduating class of RI DEM's Management Boot Camp. Graduates received their diplomas on September 9th. Among the graduates, four were NBC employees: **Anthony Turchetta** and **Cliff Koehler** from Bucklin Point and **Jim Proulx** and **Greg DaCruz** from Field's Point. Congratulations!

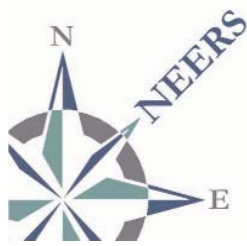


--Submitted by *Carmine Goneconte*

To Bucklin Point Operations Supervisor **Cliff Koehler's** daughter Haley for receiving a \$500 Scholarship from the Narragansett Water Pollution Control Association to assist in her studies at Bristol Community College.



--Submitted by *Carmine Goneconte*



To NBC's Environmental Scientists **Christine Comeau** and **Eliza Moore** on their abstracts being chosen by the New England Estuarine Research Society (NEERS) to present at the Fall 2016 meeting.

NEERS is a non-profit organization with a wide ranging membership from scientific and educational institutions, federal, state, and municipal agencies, and nonprofit organizations. The purpose of the society is to bring together persons actively engaged in estuarine and coastal research and management for informal discussion and exchange of ideas.

Christine's abstract "Evaluations of Bay Bacteria After Phase I and II of the Narragansett Bay Commissions CSO Abatement Project" and Eliza's abstract on "Receiving Waters Monitoring Following WWTF Upgrades to Reduce Nitrogen Loading" will be presented at the Spring House Hotel on Block Island for the annual Fall meeting October 20th through 22nd. Best of luck and congratulations Christine and Eliza!

Special Thanks...

To FP Operations Supervisor **Lisa McDaid** for her time and expertise. She assisted DEM in its training for the US Army 443rd Civil Affairs Battalion on Saturday September 17th.



The Importance of Stretching

- Improves flexibility
- Improves the range of motion in your joints
- Improves circulation
- Relieves stress
- Injury prevention and recovery
- Improves posture and technique
- Increased length of relaxed muscles
- Increased power and elasticity of our muscles
- Increased endurance and metabolism
- Assist in achieving better coordination, muscle control and proper technique in sport

Repercussions of Not Stretching

- Decreased mobility
- Decreased muscle metabolism
- Decreased muscle coordination
- Decrease power "output"
- Decreased speed
- Increased risk of injuries
- Enable your body to perform more with less energy
- For more helpful information on lifting and stretching [click here.](#)

Below are some images to help stretch for safety...



-- Submitted by *Lori Vernon*



NBC Pipeline

November 2016

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 November*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2 Open Enrollment Benefits Fair at BP 2 PM - 3:30 PM	3 Open Enrollment Benefits Fair at COB 9 AM - 10:30 AM	4 Payday	5
6 Daylight Savings Time	7	8  Election Day	9	10	11  Veterans Day	12
13	14	15	16 Supervisor Training Classes 7 AM & 2:30 PM FP Edu. Room	17 Know Your Numbers Event 7 AM - 11 AM COB	18 Payday	19
20	21	22	23	24  Thanksgiving	25	26
27	28	29	30			

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

News Briefs...

Congratulations NBC!

At the September 20th Board of Commissioners Meeting some NBC staff members accepted awards on behalf of NBC's hard work and accomplishments.

NBC received the "Best Places to Work" Award from Providence Business News for the sixth consecutive year. NBC's Senior Human Resources Representative Brenda Smith and Labor and Employee Relations Manager Diane Buerger accepted the award on behalf of NBC at the Board meeting.



From left to right: Vincent Mesolella, Brenda Smith, Diane Buerger & Ray Marshall.

NBC's Field's Point Facility received the 2015 Silver Award for having five or less National Pollutant Discharge Elimination System (NPDES) permit violations during a calendar year from the National Association of Clean Water Agencies (NACWA).

NBC's Bucklin Point Facility received the 2015 NACWA Gold Award for consistently meeting all National Pollutant Discharge Elimination System (NPDES) permit limits during a calendar year.

The Narragansett Water Pollution Control Association awarded NBC with Silver Awards for both facilities for having consistent permit compliance for 2015.

FP Operations Manager Paul Desrosiers, FP Operations Supervisor Eric Bogosian, BP Assistant Operations Manager Marc Pariseault and BP Operations Supervisor Terence Harrington accepted the awards on behalf of NBC at the monthly Board Meeting.



From left to right: Marc Pariseault, Terence Harrington, Eric Bogosian & Paul Desrosiers.

December P-Bruins Special

The P-Bruins are offering NBC a great special for upcoming games in December. Games are on **Friday, December 2nd at 7:05 PM** and **Sunday, December 4th at 3:05 PM**.

Tickets are just \$20 per person. Tickets include a hot dog and soda OR draft for those of you 21+ and a free P-Bruins hat for all kids!



Deadline to purchase is Friday, November 18th. Please email or call Talia Girard at ext. 394 on or before the 18th to purchase.

Welcome...



Katelynn Ludemann, Pretreatment Engineer



Sarah Flickinger, Environmental Scientist



Ryan Patnode, FP Maintenance Supervisor



Enrique Suquilanda, Quality Chemist

Mark your Calendars...

Join us at NBC's **Open Enrollment Benefits Fair!**

Gather information and speak to representatives about your benefit

options. Use this time to discover the benefits available to you as you prepare for on-line enrollment of benefits which is scheduled to take place beginning November 2nd for a January 1, 2017 effective date.

BP: November 2nd, 2 PM -3:30 PM
COB: November 3rd, 9 AM - 10:30 AM



Mark Your Calendars Continued...

Join us for NBC's annual free health screening event, **Know Your Numbers** on November 17th, 7 AM - 11 AM in the Main Conference room at the COB.

The screening services include:

- Body mass index
- Blood pressure
- Glucose (blood sugar) level
- Cholesterol level

Eligible employees may receive a \$100 wellness incentive award and a \$75 gift card through the MYUHC Rally program, and all participants will receive an NBC souvenir.

Register today or learn more about your other options:
<https://register.wellness-inc.com/narragansettbay> OR call 1-855-215-0230

Upcoming Supervisor Training Classes



On Wednesday, November 16th there will be two Supervisor Training Classes being held in the FP Administration Building's Education Room. Classes start at 7:00 AM and 2:30 PM. Please contact **Lori Vernon at ext. 355** to sign up.

The Water Quality Science Building Open House

The Water Quality Science Building is a state of the art facility that operates with the latest technologies and special features. There are no other environmental science facilities like the Water Quality Science Building in New England and possibly the rest of the country. Many NBC staff has asked for building tours, so we have scheduled half hour tours of the Water Quality Science Building at the following dates and times:



- **December 6 at 10 AM**
- **December 7 at 2 PM**
- **December 8 at 10 AM**

If you are interested in taking the tour, please RSVP to Katie Archambault by November 25th. Please get your Supervisor's permission to attend the tour.

-- Submitted by *Walter Palm*

Safety at Work: Lifting Techniques

Overhead Lift

- Head up, back arched
- Step into lift, raise load while moving forward, lower load while rocking backward

Power Lift

FOR MEDIUM TO HEAVY LOADS

- Feet slightly wider than shoulder width
- Staggered stance squat
- Keep load close to body
- Keep head up, back arched
- Lift with legs
- Exhale while lifting

Tripod Lift

FOR LIGHT TO MODERATE LOADS, ESPECIALLY FROM FLOOR LEVEL

- Single knee on ground
- Transfer load to opposite knee or transfer to shoulder
- Stand with load supported on knee
- Maintain load close to body
- Keep head up, back arched

Bridging Technique

- Body weight is supported by the arm rather than the muscles of the lower back
- Excellent technique for reaching activities and when leaning over your work station

Push/Pull

- Whenever possible, always push an object over pulling, to reduce forces applied to muscles and joints
- If pulling is required, always keep hips and shoulders square!

Low Level Work

- Position equipment in the safest work zone whenever possible
- Never bend at the waist or round your back when performing activities below the waist
- Take a knee for safety

Two-Person Lift

- Body mechanics the same as the power lift
- Communication is #1
- 1, 2, 3 Lift!

Golfer's Lift

FOR LIGHTER LOADS AND ONE-HANDED LIFTS

- Forward leg remains straight
- Balance on hips by elevating rear leg
- Use arm support - "Bridging"
- Lift load by dropping rear leg, creating counter lever

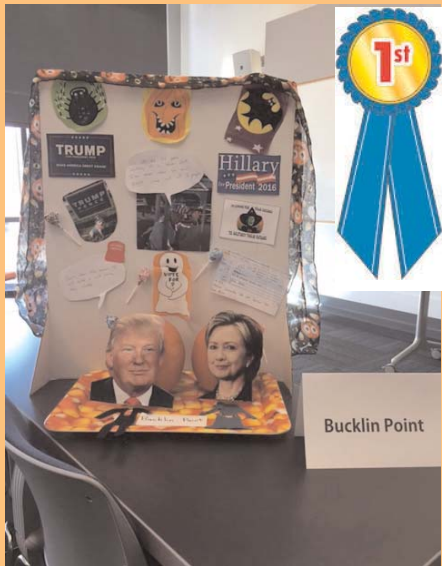
--Submitted by *Lori Vernon*

NBC Receives REF Grant from Commerce RI

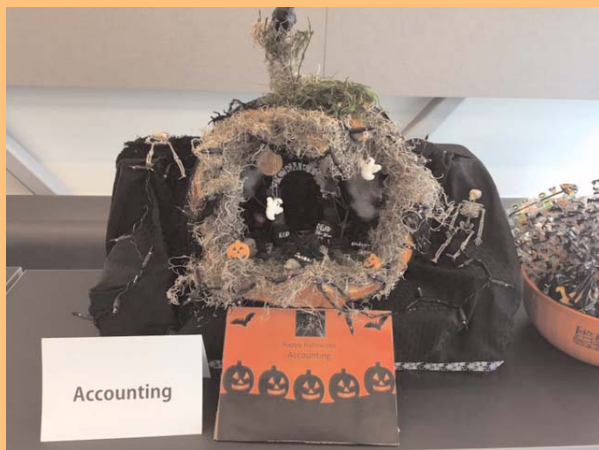
The Rhode Island Commerce Coporation has awarded NBC a grant of \$350,000 as part of the Renewable Energy Fund's (REF) 2016 Commercial Scale Grant Program. NBC's Environmental Safety and Technical Assistant Manager Jim McCaughey and Pollution & Prevention Engineer Barry Wenskowicz worked together extensively to get the application in for NBC. The funds from Commerce RI will be used towards completing a 1.5 MW wind turbine installation in Coventry, RI. Congratulations!



NBC's Annual Pumpkin Decorating Contest



NBC's Annual Pumpkin Decorating Contest Continued...



STEM Career Day at NBC

NBC held its first STEM (Science, Technology, Engineering & Math) Career Day for high school students at NBC to encourage them to explore careers in clean water science and engineering. Twenty-four students from Cumberland high school participated in the event on Friday, October 21st. Students toured the Field's Point Wastewater Treatment Facility and new state-of-the-art Water Quality Science Building. Students spent time with some of NBC's Laboratory staff to see what testing is done on a daily basis at the treatment facility and EMDA staff showed students what kind of water testing is done in Upper Narragansett Bay along with what equipment they use. It was a great success, many thanks to all the NBC staff that helped make it a great event!



NBC Environmental Chemist Kara Taglianetti with Cumberland High School Students.






NBC Pipeline

December 2016

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Calendar of Events *for December*

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
		Board of Commissioners Meeting 11 AM	IM Employee Appreciation	BP Employee Appreciation COB Employee Appreciation	Payday	
18	19	20	21	22	23	24
		FP Employee Appreciation	 First Day of Winter			Hanukkah Begins Christmas Eve
25	26	27	28	29	30	31
 Christmas Day	 Kwanzaa Begins				Payday	New Year's Eve
<i>All meetings are held at the Commission's One Service Road Offices unless otherwise noted.</i>						

News Briefs...

2016 Employee Appreciation

Employee Appreciation Luncheons for...

IM Employee Appreciation Event

- 12/14 at 11:30 AM

COB, Pretreatment, EMDA and Lab Employee Appreciation Event

- 12/15 from 12 PM - 2 PM

Bucklin Point Employee Appreciation Events

- 7 AM - 3 PM shift: 12/15 at 11:30 AM
- 3 PM - 11 PM shift: 12/15 at 6 PM
- 11 PM - 7 AM shift: 12/16 at 5:30 AM

Field's Point Employee Appreciation Events

- 11 PM - 7 AM shift: 12/20 at 5:30 AM
- 7 AM - 3 PM shift: 12/20 at 11:30 AM
- 3 PM - 11 PM shift: 12/20 at 6 PM



URI Offers Discounted Tickets for Rams Season

The URI Rams would like to offer NBC discounted tickets for their home games this season! They are currently ranked #23 in the country and are looking forward to an exciting season! Tickets can be purchased through the website with a code. Instructions on how to purchase and the list of games are in the photo to the right. This is a great offer for those basketball fans! Tickets with the discount range from \$12-\$18 depending on where you choose to sit. Tickets are normally between \$15-\$32 without a discount.

A promotional flyer for URI Rams tickets. The top text reads "EXCLUSIVE OFFER FOR THE NARRAGANSETT BAY COMMISSION! SPECIALLY PRICED TICKETS FOR ALL URI HOME GAMES". Below this is a list of games with dates: 11/11/16 DARTMOUTH, 11/14/16 MARIST, 11/16/16 BROWN, 11/25/16 BELMONT, 12/6/16 OLD DOMINION, 12/18/16 HOLY CROSS, 12/22/16 WILLIAM & MARY, 1/3/17 SAINT JOSEPH'S, 1/12/17 LA SALLE, 1/15/17 UMASS, 1/28/17 ST. BONAVENTURE, 1/31/17 GEORGE WASHINGTON, 2/10/17 DAYTON, 2/15/17 FORDHAM, 2/25/17 VCU, 3/4/17 DAVIDSON. A box on the left says "VISIT GORHODY.COM" and lists steps: "-CLICK 'TICKETS'", "-CLICK 'BUY TICKETS'", "-CLICK 'PROMOTIONS/PRESALES'", "-ENTER THE CODE 'URINBC'". At the bottom right, it says "QUESTIONS OR CONCERNS TYLER FOLEY TFOLEY@URI.EDU (401)874-4295". The Narragansett Bay Commission logo is at the bottom left. The background shows a basketball arena.

Any questions or concerns please feel free to contact **Talia Girard** by email or at **ext. 394** OR Tyler Foley, a representative from URI at the email or phone number above.

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 Thursday, December 15th in the main conference room.

Fox Spotted Throughout the NBC Campus

A fox has been seen around the NBC Campus starting on November 29th. Derek Lindia from Customer Service spotted him a few times on the 29th, first coming from Hudson Oil and making his



Photo credit: Derek Lindia

way through the NBC COB parking lot. He also made his way to the train tracks at the intersection of Shipyard Street and over to where the tracks meet at the light on Allens Avenue. He was last seen in the parking lot Friday night December 2nd and Monday morning December 5th. Please be aware and contact **Tom Uva** at **ext. 470** or **Jim McCaughey** at **ext. 352** if you spot the animal. DEM has been contacted for assistance.

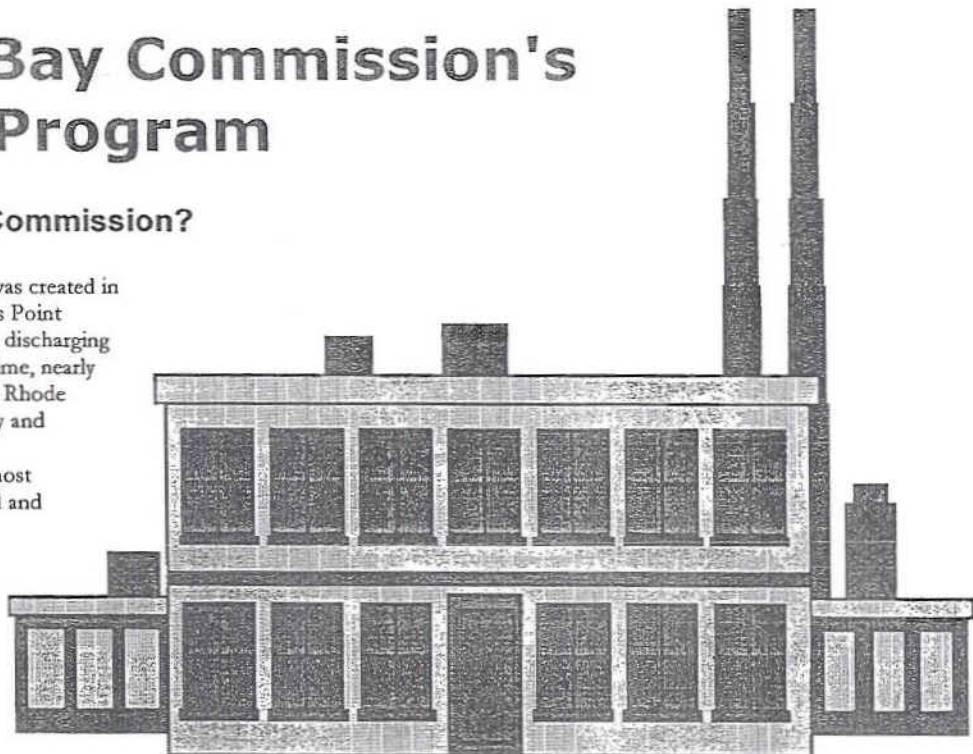
EDUCATIONAL DOCUMENTS

Narragansett Bay Commission's Pretreatment Program

What is the Narragansett Bay Commission?

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

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



What is the purpose of a Pretreatment Program?

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

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

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

How effective is the Pretreatment Program?

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

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

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

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

How were permit fees determined?

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

What if I don't get a permit?

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

What if I need technical assistance?

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

What if I have more questions?

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

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.

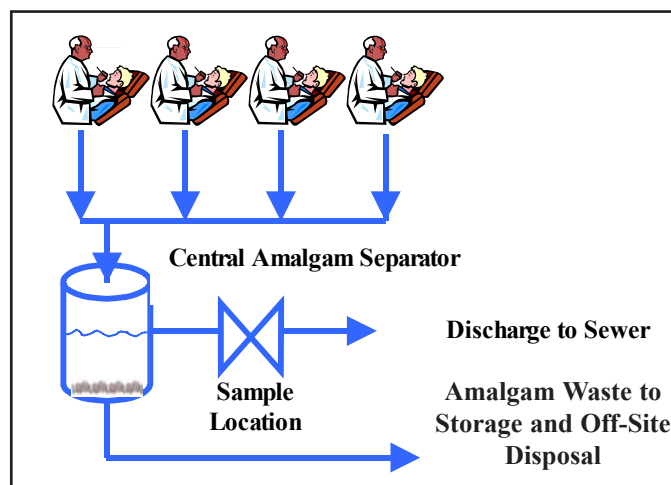
The NBC strongly encourages the use of ISO 11143 certified amalgam separators (Option 1). These separators help to remove most mercury from dental wastewater without being overly burdensome to operate or maintain. Based on NBC's current discharge limit for mercury, as little as 1/10,000 of a gram of 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.

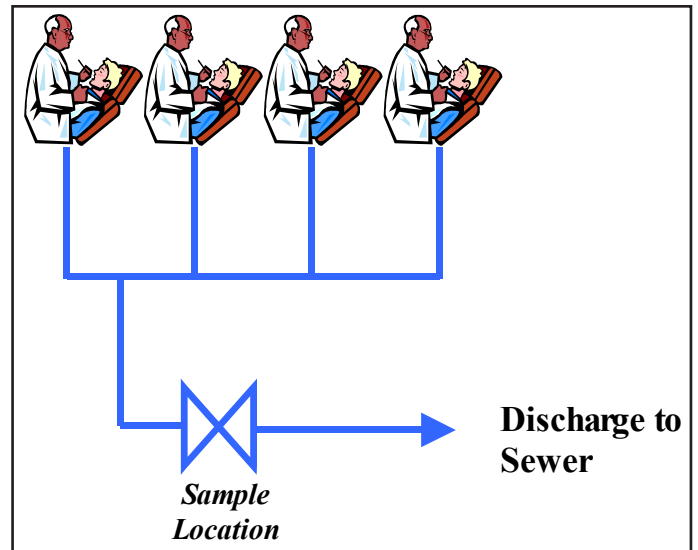
The wastewater sample collection valve must be configured and installed in such a manner that a representative sample of all and any amalgam containing wastewater can be collected at any time during normal operating hours. This will require the installation of a single central sampling location for all 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)

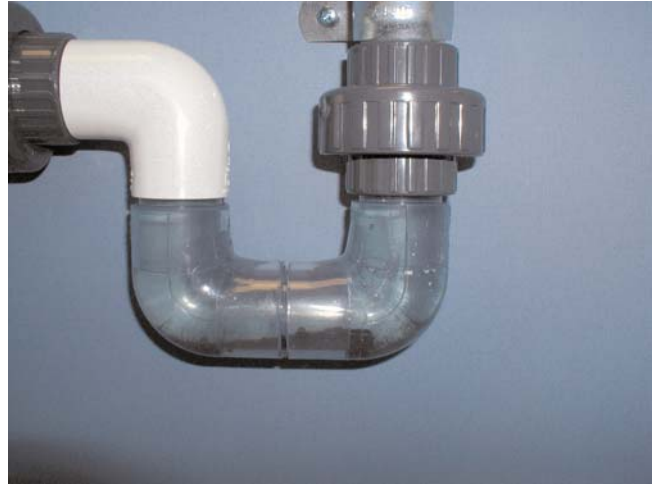
The above list is not all-inclusive and NBC may give written approval to use other cleaners. The NBC will review requests to use other cleaners upon receipt of a Material Safety Data Sheet (MSDS) for the proposed cleaner.

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

Dental Amalgam Recycling Facilities - Northeast Region:
www.des.state.nh.us/nhppp/amalgam_recycling_facilities.htm

Great Lakes Pollution Prevention Roundtable:
www.glrppr.org/contacts/gltopichub.cfm?sectorid=131

Mercury Spill Kit Comparative Information:
www.brooks.af.mil/dis/DIS60/sec6b.htm

Naval Institute for Dental and Biomedical Research:
www.dentalmercury.com/home.cfm

NEWMOA Dental Mercury Topic Hub:
www.newmoa.org/prevention/topichub/toc.cfm?hub=103&sub-sec=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.

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



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
www.epa.gov/mercury/index.html
www.state.ri.us/dem
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?

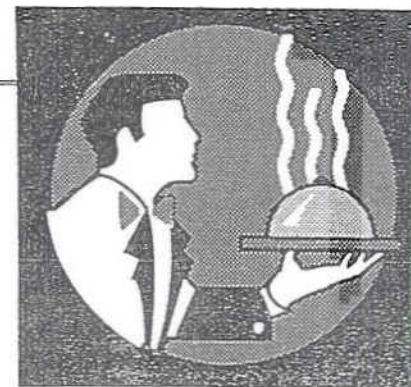
Grease discharges are predominantly generated from washing and cleaning operations and not from fryolators or deep frying units as most people might think. The pot washing sink, dishwasher pre-rinse station, and garbage grinder are the major sources of grease discharges to the sewer system.

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! ■

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

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

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

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



1 Service Road
Providence, RI 02905

Phone: 401.461.8848
Fax: 401.461.6540
www.narrabay.com



NARRAGANSETT BAY COMMISSION

FATS, OILS, & GREASE



ENVIRONMENTAL RESULTS PROGRAM

One Service Road
Providence, RI 02905

Tel: 401.461.8848
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www.narrabay.com

Fats, Oils and Grease

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



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

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

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

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

The NBC FOG Environmental Results Program

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

1. Compliance Assistance

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

2. Self Evaluation

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

3. Regulatory Inspections

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

4. Certification

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

Biodiesel Production

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



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

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?

- 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



NARRAGANSETT BAY COMMISSION

LINCOLN SEPTAGE RECEIVING FACILITY

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.

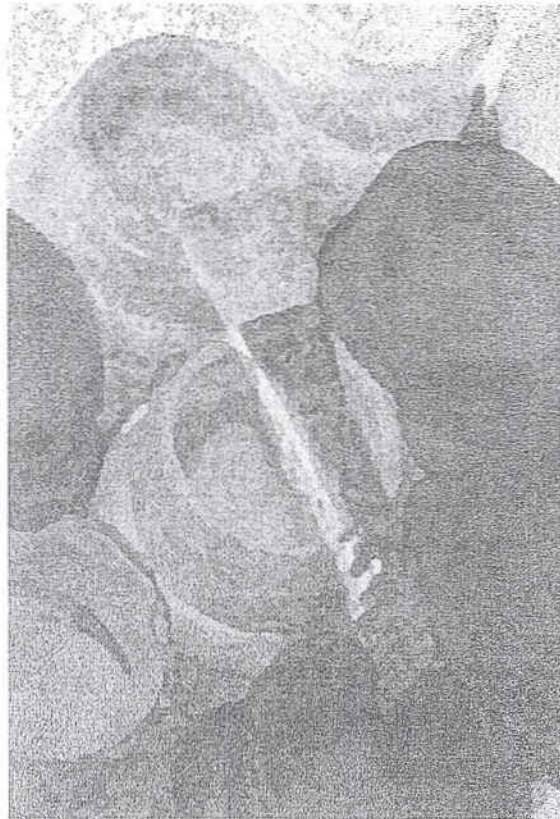
- Upon completing the discharge, the hauler must properly clean up and make the station neat and safe for the next hauler. This includes putting away all hoses, shutting all

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.ritrc.org/sie/cecodepot/ceco_dispo_hhwc.pdf

A searchable health & safety database by medium: www.ritrc.org/sie/cecodepot/ceco_dispo_hhwc.pdf

List of references and more:
www.library.umsl.edu.au/internet/paint/ind/arthazards.htm

Comprehensive list of articles covering many mediums:
www.crowweb.com/outreach/crowweb/links.cfm?topicID=2

List of books, periodicals and organizations:
<http://wally.ri.edu/pubs/guide/healthaz/ind>

Comprehensive list of articles:
www.library.umsl.edu.au/internet/paint/ind/arthazards.htm

Article entitled *Art, Painting and Drinking*:
http://www.ritrc.org/sie/cecodepot/ceco_dispo_hhwc.pdf

Very comprehensive list of resources for many media:
www.ritrc.org/sie/cecodepot/ceco_dispo_hhwc.pdf

Safety Primer with references:
www.nrc.gov/epo/pubs/consumer66n72e.htm

Safety Primers:
www.artspaceonline.org/solutions/safety.html

www.unlax.edu/eds/arthaz.html

www.gambincolor.com/safety.html

Studio Ventilation:
www.craftsupport.com/nysh/industrial.htm

How to manage contaminated rags:
www.cobg.gov/p2/stoppow1.pdf

Technical letters:
<http://www.danrdmuth.com/lettera.html>

NARRAGANSETT BAY COMMISSION Environmental, Health & Safety

BEST PRACTICES

for

FINE ART PAINTING STUDIOS



Wise purchasing choices will help you reduce or eliminate hazards in your studio. Tables 1 and 2 provide information about metals and solvents in pigments to help you choose safer materials for your work. You may be able to choose less toxic paints by comparing the information from the Material Safety Data Sheet (MSDS) about the types and amounts of metals contained in your paints (see Table 2). For example, you may select a paint containing an iron-based pigment rather than a more toxic lead chromate or cadmium pigment. You can also compare properties of available solvents to decide which is best for your purpose and which is a safer choice.

When you are deciding which solvent to use, consider that you may reduce your health risks by using solvents with low values for any or all of the following characteristics: toxicity, evaporation rate, flammability, photochemical reactivity, ozone depleting potential, Worker Exposure Value and Environmental Hazard Value. Also look for a low Vapor Pressure, which indicates how quickly the solvent will evaporate into the air you breathe (see Table 1). Low-odor mineral spirits would be a safer choice than regular mineral spirits or turpentine. Finally, buy only as much material as you need to complete your work so that you are not unnecessarily storing large amounts of hazardous materials in your studio.

Store supplies and materials properly by following the manufacturer's instructions. Incompatible materials must be stored separately, in covered and labeled containers, so they do not react (see Table 1). For example, products containing oxidizers, such as bleach, should be stored in a location separate from flammable materials to reduce potential fire hazards and other dangerous reactions. Label all products with the date of purchase and the date you open the container. Use an indelible marker or graphite pencil to label each container, and replace the label if it becomes illegible. Maximize the shelf life of your materials by keeping air out of paint cans and tubes. Use oldest supplies first and do not keep supplies that you will never use again. Donate excess stock to someone who can use it, such as another artist, local theater group, art schools or a materials exchange (www.ritrc.org/sie/cecodepot).

As you are probably aware, many art materials contain ingredients that are toxic to your health and the environment. The paints, pigments, colorants and glazes you use may contain toxic metals. Commonly-used paints, like oil, acrylic, watercolor and gouache, may contain heavy metals such as cadmium, chromium, and lead, which can be hazardous to your health and the environment. Also, oil paints contain solvents and require cleanup with solvents, such as turpentine, mineral spirits, or other paint thinners. Oil paints, resins, and solvents each pose fire safety hazards. Many solvents are toxic and flammable, and their use contributes to the formation of ground-level ozone, contaminating the air we breathe, and a few can deplete the ozone layer in our stratosphere. Potentially increasing our exposure to harmful effects of the sun. If improperly disposed of, these materials pose environmental and community health hazards. You can reduce these risks by determining which materials contain hazardous ingredients, and by finding and using safer alternatives. If an alternative is not available, then you must know how to use and dispose of the hazardous materials safely. Remember that even less toxic alternatives must be handled safely and disposed of properly.

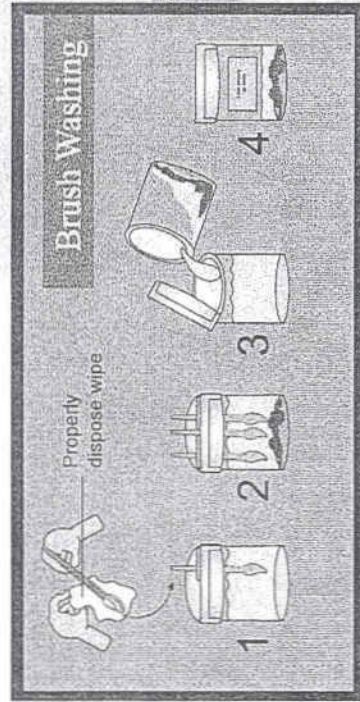
Use of many of these materials can produce wastes controlled by a variety of local, state and federal requirements, such as Rhode Island's Hazardous Waste Management Act, which authorizes the RI Department of Environmental Management (RIDEM) to regulate hazardous waste management and disposal, and the federal Clean Water Act which authorizes both RIDEM and local sewer authorities such as the Narragansett Bay Commission (NBC) to regulate wastewater disposal to Publicly-Owned Treatment Works (POTW). Sewer authorities have obligations under the Clean Water Act to regulate sources (such as painting studios) that discharge process wastewater into the sewer system. The practices recommended in this guidance document can help you to understand, and minimize or eliminate hazardous materials and wastes from your work. This may eliminate the need for you to obtain permits from these government agencies.

Exposure to solvents and toxic metals can be dangerous to your health. Common routes of exposure include ingestion, inhalation and absorption through the skin. Less toxic substitutes can often be used both in your painting process and for clean-up. Oil paint can be cleaned off hands and brushes with baby oil, followed by soap and water. Soap and water alone may be adequate if you are using acrylic paints, gouache or watercolors. Solvents such as mineral spirits, turpentine or other paint thinners may be needed for more demanding jobs. Before you use straight solvents, try a 50:50 mixture of baby oil and solvent. If using a mixture doesn't work, and you need to use a straight solvent, read the product information for alternative products to choose a less toxic solvent.

To use these paints and solvents safely, follow recommendations on the product's label, MSDS and Technical Data Sheet. Ventilate the work area whenever possible to remove airborne pollutants. Avoid using powders that generate airborne dusts. The dust may contain toxic metals, which cause serious harm when inhaled, absorbed, or ingested. If you are unable to remove these hazards from your workplace, you should eliminate or reduce bodily contact by using personal protective equipment such as gloves, safety glasses/goggles, aprons and other barriers to avoid absorption of metals and solvents through the skin. In addition, consider using appropriate respiratory protection when spray painting or working with powders, and always when recommended on a product's MSDS, to prevent inhalation of toxic materials. There may be certain health considerations when choosing a respirator, so please consult with a medical professional before making your purchase.

To expedite clean up and to reduce solvent use, squeeze excess paint off brushes, rollers or thinners, and when possible, put it back into the original labeled paint container. To minimize the amount of water or solvent needed to clean brushes, paint-out the paint remaining on a brush after a project is complete. Other water conservation methods include wash water reuse and counter-current rinsing. Sometimes, clean-up will require a strong solvent such as mineral spirits, turpentine or other paint thinners. To clean brushes and reuse solvent, hang your brush so that the bristles are covered by solvent but do not touch the bottom of the container. Most pigment solids will separate from the solvent, falling to the bottom of the container. When the brush is clean, remove it and slowly pour the solvent into a clean container, being careful not to disturb the solids at the bottom of the original container. This will allow you to reuse the solvent and properly dispose of the solids in the bottom of the original container. (See the disposal paragraph below.) Remember to cover all solvent containers, even while your brushes are soaking, to reduce fumes in your work area and to prevent fire and personal exposure. Use a temporary aluminum foil cover, perforated plastic cover or other cover (your brush handle may stick out through the cover) to cut down on the amount of vapors that escape into your work environment. This option should be for short term storage only while you are working with the materials. These tops will fail to prevent spills if the container tips over. Some plastic tops are fire for solvent storage. Many paint solvents are sold by the manufacturer in plastic containers. Remember to check containers periodically to ensure they will hold up for extended periods of time.

The best solution for long-term solvent storage is to put it back into its original container.



REMOVE excess paint from brush. SOAK the suspended brush vertically in paint thinner.

SETTLE pigments.

DECANT the good thinner into a new container so it can be reused again.

LABEL and properly manage the residue.

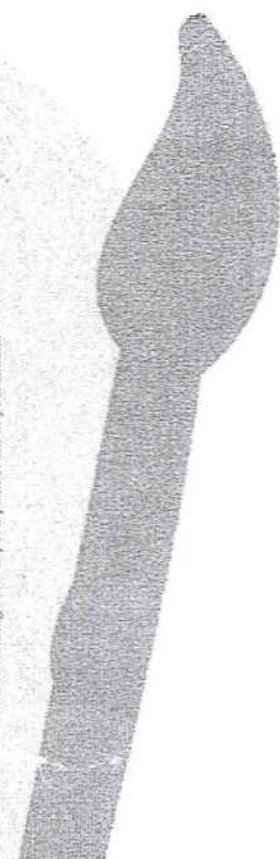
Do not put even small amounts of waste oil paint or solvents down the drain, because they can ultimately reach Narragansett Bay. Sewage treatment plants are not designed to treat these substances. These materials harm sewer workers, cripple the biological sewage treatment process, and can cause fish-kills in the receiving waters. If as part of doing business you put rinse-water, wash-water or other process wastewater down a drain to the sewer system, you must contact your local sewer authority (i.e. NBC) to determine if a wastewater discharge permit is required. The practices recommended in this guidance document can help you to understand and minimize or eliminate hazardous materials and wastes from your work. This may eliminate the need for you to obtain permits or it may reduce your permit requirements and costs.

Properly dispose of spent solvents, paint wastes, aerosol paint cans, and other wastes generated in your studio. Hazardous wastes generated by household sources (including non-commercial artists) in Rhode Island, can be dropped off free of charge at the Rhode Island Resource Recovery Corporation's Eco-Depot in Johnston. Non-hazardous waste can be disposed of with your municipal trash. In Rhode Island, a waste is considered hazardous if it is flammable/ignitable with a flashpoint less than 200 F (see MSDS), or if it contains toxic heavy metals above a TCLP concentration. Toxic heavy metals include Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Silver, and Selenium (see Table 2 for more information). If you are using these types of materials then you should consider the wastes to be hazardous and dispose of them as such. They should be stored in covered and labeled fireproof containers. Wipes must be handled as hazardous waste if they are saturated (dripping) with liquids that are considered hazardous wastes. If you use wipes in your clean-up, you need to drain any liquid or solvent from them and then dispose of the wipes separately from other trash. Otherwise dispose of dry non-hazardous wipes as municipal trash. Small amounts of non-hazardous waste paint can be air-dried and also disposed of as municipal trash.

Commercial artists are considered a small business and must abide by different regulations for hazardous waste disposal than home hobbyists. Commercial artists cannot use the RIRRC's Eco-Depot to dispose of hazardous wastes. If you are a commercial artist who generates hazardous waste, you must register with the RIDEM as a hazardous waste generator. You must also hire a licensed hazardous waste transporter to remove waste for proper recycling, treatment and disposal at an approved site. For more information on your hazardous waste responsibilities, see RIDEM's "Hazardous Waste Compliance Workbook for Rhode Island Generators" at: <http://www.state.rhodeisland.gov/eh&s/eh&s/waste/pdff/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 stocked spill kits at locations where they will be needed, and know how to use them. When you are using powders, wipe up small areas with a damp cloth instead of using a wet-mop or broom. Clean larger areas with a vacuum cleaner equipped with a high-efficiency particulate air (HEPA) filter. Following these suggestions will help you avoid undesirable wastewater and airborne dusts. Never use a wet-vac to clean a solvent spill, because the vapors can explode in the vacuum. Instead, wipe up the small solvent spill with a rag, drain the rag, then dispose of it and the waste solvent as if it were hazardous waste. Use personal protective equipment such as gloves and respirators. Be sure to contact the RIDEM in the case of a large solvent spill to request assistance and spill clean-up guidance.

Practice good housekeeping to promote a safe and efficient work environment. Properly manage shop towels, wipes and rags in your studio. Store wipes that have been in contact with flammable materials (such as certain paints and solvents) in a self-closing fireproof canister until ready for disposal. Wash dirty studio clothing separately from your other laundry to avoid cross-contamination. Be aware that your shoes can become a source of toxic metal contamination in your home, because you may track paints and dusts from the studio into your living area. Wipe your feet or have separate studio shoes for your work. Always wash your hands before eating or smoking, and wash your hands periodically during the day as you work. Do not put your hands near your eyes, nose, or mouth while working. Never put a paint brush in your mouth.



E,H & S Reference Information

Table 1 - Environmental and Health Hazards of Solvents

Organic Compound	EHV	WHV	HV _{avg}	Exposure Limit (ppm)	Flash Point (F)	Vapor Pressure (mmHg)	Water Solubility (%)	Fire Hazard Classification	Notes
Acetone	1.6	1.6	2	250	0	180	100	IB flammable	solvent, incomp. w/acids
2-Butoxyethanol	2.5	1.6	2	5	143	1	100	IIIA combustible	miscibility agent, skin adsorbs, incomp. w/caustics
D-Limonene	1.1	0.5	1	30	120	20	0	II combustible	has citrus odor
Ethyl Acetate	3.6	2.6	3	400	24	73	10	IB flammable	solvent, incomp. w/nitrates, alkalis & acids
Isopropyl Alcohol	1.4	1.5	1	400	53	33	100	IB flammable	solvent, incomp. w/ acids and chlorine
Methyl Ethyl Ketone	3.9	1.6	3	200	16	78	28	IB flammable	paint remover, waste may fail TCLP, incomp. w/ ammonia
Methylene Chloride	3.3	2.8	3	25	none	350	2	—	solvent, incomp. w/ acids and chlorine
Mineral Spirits	1.5	1.9	1	100	104	2	0	II combustible	thinner, may contain 2, 8 or 22% aromatics
VM & P Naphtha	1.3	1.3	1	350	40	20	0	II flammable	may contain 1, 2 or 20% aromatics
Odorless Mineral Spirits	1.1	1.2	1	200	104	1	0	II combustible	thinner, may contain up to 0.25% aromatics
Toluene	3.7	2.1	3	100	40	21	0	IB flammable	solvent, aromatic TIO, skin adsorbs
Turpentine	na	na	na	100	65	4	0	IC flammable	thinner, skin adsorbs, incomp. w/ chlorine
Xylene	3.9	1.3	3	100	80	8	0	IC flammable	aromatic, skin adsorbs, incomp. w/ strong acids

- Organic compounds, such as those listed above, can be found alone or in mixtures which are used to dilute (thin) paint, strip paint, dissolve resin, make medium or for cleanup. The health and environmental values of greatest concern are bolded.
- Environmental Hazard Value (EHV) accounts for impacts on aquatic ecosystems, air quality and land contamination.
- Worker Hazard Value (WHV) accounts for impacts on human health in a work environment. Although a low WHV is safest, the release, inhalation, ingestion, skin/eye and other contact with organic solvents should be avoided.
- Average Hazard Value (HV_{avg}), where 1 is safest is equal to the average of the EHV and the WHV.
- Sewer regulations prohibit businesses from discharging flammable liquids, hazardous waste, solvents, paint thinner or stripper, methylene chloride, naphtha, toluene, and xylene and also limit the amount of other organic and inorganic compounds that can be discharged into the sewer.
- When solvent use is necessary, maximize safety by choosing one that has a high exposure limit, high flash point, low vapor pressure and a low hazard value.

Table 2 - Environmental and Health Hazards of Metals

Metal	EHV	WHV	HV _{avg}	NBC limit (mg/l)	RCRA TCLP (mg/l)	PBT	Exposure Limit (mg/m ³)	Carcinogen	Used in Paint Colors including:	Notes
Arsenic	3.9	2.2	3	0.10	5		0.002	Y	Y W R	skin adsorbs
Barium	0.4	0.8	1	none	100		0.5		Y (W) R (B)	PEL is for soluble barium compounds
Cadmium	4.1	2.4	3	0.07	1	Y	0.005	Y	Y (W) R (B)	a PBT according to the Ecology PBT Working List
Chromium	4.7	1.9	3	1.63	5		0.5		Y (W) R (B) G	Hex chrome is more toxic than trivalent form
Copper	3.0	2.9	3	1.20	none		1.0		B G B	prevent skin & eye contact
Lead	4.1	2.6	3	0.29	5	Y	0.05		Y (W) R (B) G	prevent skin & eye contact
Mercury	4.0	1.7	3	0.005	0.2	Y	0.05		(W) R (B)	volatile; prevent skin contact
Nickel	4.0	2.4	3	1.62	none		0.015	Y	(W) R (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		M	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_{avg}), 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/m³) include calcium, aluminum and iron.
- The risk of inhaling metals are highest for fine art painting operations involving spray painting, airbrushing, sanding, dry powders & chalks and torching.
- Other metals of concern that can be found in oil, watercolor and other paints include antimony, cobalt, manganese, molybdate, strontium and titanium.

Useful Information and Definitions

Corrosives Corrosives are acids (e.g. nitric acid, hydrochloric acids or ferric chloride) that have a pH below 2 and alkalis (e.g. sodium hydroxide or lye) that have a pH above 12.5 standard units.

Environmental, Health and Safety (EH&S) agendas protect our environments and human health. Note that certain substances that are relatively safe to work with may still be harmful to the environment.

Flash Point is the lowest temperature at which a solvent will flame when an ignition source is present.

Halogenated compounds contain chlorine, bromine or fluorine. In the upper atmosphere, halogenated organic compounds are most notorious for being ozone depleting substances (ODS). Certain halogenated compounds are also direct (i.e. methyl chloroform) or indirect (i.e. methylene chloride) greenhouse gases (GHG). Many halogenated organic compounds are carcinogens and do not have a flash point.

Material Safety Data Sheet (MSDS) chemical manufacturers supply a MSDS to inform industrial purchasers and users of hazardous chemicals of the reasonably foreseeable physical and chemical hazards that may arise from the use of those chemicals.

Oxidizing compound is a reactive chemical such as bleach, chlorine, hydrogen peroxide and nitric acid.

Permissible Exposure Limit (PEL) is the maximum concentration of a chemical in air that a worker can be exposed to without health consequences.

Persistent Bioaccumulative Toxics (PBT) are highly toxic compounds that last a long time and build-up to high levels in the food chain.

Publicly Owned Treatment Works (POTW) is a sewage treatment facility.

Resource Conservation and Recovery Act (RCRA) is the federal law that governs the disposal of hazardous waste.

Solvent is a typically volatile, organic (aliphatic, aromatic or unsaturated) liquid capable of dissolving other compounds such as paints, oils or resins. Organic solvents are incompatible with oxidizers.

Total Toxic Organics (TTO), including methylene chloride and toluene, are listed in 40 CFR Section 433.111e), Total Toxic Organics definition (Appendix 9.1).

Toxicity Characteristic Leaching Procedure (TCLP) is one of the tests for 40 compounds that can characterize a waste as hazardous.

Vapor Pressure is a direct indication of how quickly a substance will evaporate. An organic compound with a vapor pressure over 2 mmHg is considered volatile.

Volatile Organic Compounds (VOCs), especially aromatics (i.e. toluene and xylene) that are the most photochemically reactive VOCs, are notorious for causing smog (ozone in the lower atmosphere). Certain VOCs are also direct (i.e. ether) or indirect (i.e. aromatics) greenhouse gases.

This brochure was funded in part by a US EPA Region 1 grant and the Narragansett Bay Commission and was produced by a working group of art and environmental professionals including: Pamela Gaili (RIDEM), Alan Cantara (RISD), Rafael Cuello (NBC), Kathie Florshelm (Photographer), Rebecca Poiva (RISD), Randall Rosenbaum (RISCA), and Barry Weiskowitz (NBC).

RI Agencies Providing Further Information

Narragansett Bay Commission (NBC)
(401) 461-8848 - www.narrabay.com

RI Department of Environmental Management (RIDEM)
(401) 222-6822 - www.state.ri.us/dem

RI Dept. of Health, Occupational Health & Safety Consultation Services
(401) 222-2438 -
www.health.state.ri.us/environment/occupational/Home.htm

RI Resource Recovery Corporation (RIRRC)
(401) 942-1430 - www.rirrc.org

RI School of Design (RISD)
(401) 454-6780 - http://intranet.risd.edu/departments/default.asp?department=Environmental_Health_and_Safety

RI State Council on the Arts (RISCA)
(401) 222-5880 - www.risca.state.ri.us

Other Agencies

Art and Creative Materials Institute (ACMI)
(617) 426-6639 - www.acmi.net.org

Arts, Crafts, and Theater Safety (ACTS)
(212) 777-0062 - www.caseweb.com/acts

Massachusetts and Rhode Island Poison Center
(800) 222-1212 - www.maripoisoncenter.com

National Institute for Occupational Safety and Health (NIOSH)
(800) 356-5674 - www.niosh.com/my

Occupational Safety and Health Administration (OSHA)
(202) 523-7075 - www.osha.gov

RCRA Hotline
(800) 424-9346 - www.epa.gov/epaoswer/hotline



Narragansett Bay Commission
One Service Road
Providence, RI 02905



NARRAGANSETT BAY COMMISSION
Environmental, Health & Safety

BEST MANAGEMENT
PRACTICES
for
FINE ART PAINTING STUDIOS





Narragansett Bay Commission

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

Vacation Shutdown Prohibited Sewer Discharges

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

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

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

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

Vincent J. Mesolella, *Chairman*

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

ATTACHMENT VOLUME I

SECTION 2

***TYPICAL NBC WASTEWATER
DISCHARGE PERMITS***

***TYPICAL METALFINISHER
WASTEWATER DISCHARGE PERMIT***



WASTEWATER DISCHARGE PERMIT

Permit Number: P1112-237-0221

Company Name: **ARMBRUST INTERNATIONAL, LTD.**

Facility Address: 735 Allens Avenue, Providence, RI 02905

Mailing Address: 735 Allens Avenue, Providence, RI 02905

Facility President: Mr. James Roberts

Facility Authorized Agents: Mr. Karl Kunzmann

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. James Roberts and Armbrust International, Ltd.**, 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 - X.

**This permit becomes effective on March 1, 2016
and expires on February 28, 2021.**

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 19, 2016
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 limit of 1.20 ppm and the monthly average limitation of 0.65 ppm at the combined point of cyanide process discharge, prior to combining with non-cyanide bearing wastewater streams, and at the discharge from the cyanide treatment system. Upon conducting an engineering review of the facility, it has been determined that all waste streams have the potential to be contaminated with cyanide due to the configuration of the electroplating operation. Therefore, the EPA Total Cyanide Metal Finishing limitations will be enforced at the final discharge location, the discharge baffle of the pH adjustment tank, Sample Location #1. The NBC effluent discharge limitations for Total Cyanide are more stringent than the EPA Total Cyanide limitations at the final effluent. Therefore, the NBC Total Cyanide limitations will be enforced at the final discharge location.

B. Permitted Discharges:

1. The permittee is authorized to discharge the following tanks, solutions, or process wastewater streams to the NBC's facilities:
 - a. Treated Metal Finishing Wastewaters;
 - b. Treated Soap Solutions;
 - c. Treated Electrocleaner Solutions;
 - d. Treated Nickel Activator Solutions;
 - e. Treated Acid Bath Solutions;
 - f. Treated Mass Finishing Wastewaters;
 - g. Treated Faceting Rinsewaters;
 - h. Boiler Blowdown.
2. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

C. Prohibitions:

1. The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
 - a. Concentrated Electroplating Solutions;
 - b. Concentrated Cyanide Solutions;
 - c. Acidic Solutions with a pH less than 5.0 standard units;
 - d. Caustic Solutions with a pH greater than 11.0 standard units;
 - e. Non-Contact Cooling Waters from the Wire Casting/Forming Departments;
 - f. Degreasing Solutions;
 - g. Solvents;
 - h. Sludges;
 - i. 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 January 20, 1995, December 28, 1999, August 27, 2003, March 24, 2004, February 24, 2006, August 10, 2007, July 24, 2008, November 4, 2010, March 29, 2011, January 18, 2012, November 28, 2012, April 3, 2013, and July 23, 2013. 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 (1) sample location must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - The discharge baffle of the pH adjustment tank, collecting all process discharges specified in Section B(1)(a through g) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Location #1 must be in compliance with the effluent limitations specified in Section A, Table 1, and the EPA Metal Finishing Standards referenced in Section A(5) of the permit.

2. The permittee shall operate and maintain a pretreatment system in conformance with plans received by the NBC from the permittee on June 20, 1995, January 3, 2003, January 28, 2004, June 3, 2004, December 7, 2005, November 18, 2011, and December 11, 2014. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.
3. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.

E. Boiler Facility Requirements:

1. The permittee has hard plumbed all boiler blowdown and steam condensate discharges. A sample port has been installed on each boiler room process water discharge line. The sample port must have a minimum of an eight (8) inch clearance from the floor so that a sample bottle can be inserted. Daily visual inspections of steam condensate must be documented in the logbook as required in Section H(2) of this permit.
2. The permittee has permanently sealed all open floor drains and any other open process wastewater and sewer discharge connections within the boiler facility, so as to prevent an incidental or accidental discharge from the boiler room.

3. The permittee is strictly prohibited from discharging spilled oil contained in the boiler facility, fuel storage area(s), etc. into the sewer. Spilled oil must be collected for proper off-site disposal. The permittee must take appropriate measures as described above and any others necessary to ensure a spill will not discharge to the sewer system.

F. Zero Discharge/Recycle Operation Requirements:

1. The permittee shall operate and maintain a Zero Process Discharge Wastewater Recycle System as illustrated in the plans that have been received by the NBC on July 21, 2010 and November 18, 2010. This system shall be used specifically for the purpose of recycling wastewater or eliminating discharges from the following process operations:
 - a. Acid Etching Operations;
 - b. Non-Contact Cooling Waters from the Wire Casting/Forming Operations.
2. The permittee shall make no changes to the process tanks or pretreatment system without first submitting plans to the NBC for approval. Only those solutions indicated as being discharged to the treatment system on the plans received by the NBC on July 21, 2010 and November 18, 2010 may be treated on-site in the pretreatment equipment.
3. If any problems with the recycle system arise or if the permittee would like to connect to the sewer for the purpose of discharging wastewater streams from the acid etching operations and/or wire casting/forming operations, the permittee must notify the NBC, in writing, and obtain written approval from the NBC before resuming discharge or making any physical changes to the process tanks, the pretreatment recycle system, or associated piping.
4. The permittee has capped-off and sealed all sewer drain lines associated with the acid etching and wire casting/forming operations. 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, excluding permitted satellite process discharge locations.
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 acid etching operation discharges and/or non-contact cooling water discharges from the wire casting/forming operations to the sewer may be considered an intentional violation of the NBC's Rules and Regulations and may subject the permittee to civil and/or criminal penalties as defined in R.I.G.L. §46-25-25.2 and §46-25-25.3.

G. Monitoring Requirements:

1. The permittee shall monitor the pH of the effluent discharge and record it continuously. The permittee shall report the results monthly in a summary report giving the maximum, minimum and average pH readings for each day of operation (see sample copy enclosed). The data must be reported directly from the recording chart to an accuracy of 0.1 standard units. The pH Monitoring Report must be received by the NBC within thirty (30) days from the end of the month in which the data is recorded. The original recording chart must be maintained on site for a period of at least three (3) years.
2. 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 discharge baffle of the 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)	Copper (Total)	Silver (Total)
Chromium (Total)	Lead (Total)	Zinc (Total)
	Nickel (Total)	

The composite samples collected during all sampling months are to be preserved and analyzed in accordance with EPA protocols for the following parameters:

Copper (Total)	Nickel (Total)	Zinc (Total)
	Silver (Total)	

- b. 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 discharge baffle of the pH adjustment tank, Sample Location #1 (i.e., one (1) grab sample collected every two 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 greater than 12.0 standards 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**.

Table 2 attached hereto summarizes the sampling requirements for this facility.

3. All water meters measuring flows, which ultimately discharge to the sampling locations specified previously, are to be read at the start of sampling and at the end of sampling. These readings and the resultant total flow are to be submitted with the sampling results.
4. The analytical results for each sampling month listed above must be received by the NBC within thirty (30) days after the end of the month in which the samples are to be collected. All sampling and analyses are to be done in accordance with EPA approved procedures (40 CFR §403 and 40 CFR §136). The permittee must complete and submit a Self-Monitoring Compliance Report (copy enclosed) with each certified laboratory analysis sheet including chain of custody documentation. The laboratory analysis report must indicate the EPA approved test procedure for each parameter listed. All Self-Monitoring Compliance Reports must be signed by the permittee or authorized agent and certify that the information submitted is accurate and complete to the best of their knowledge.
5. The permittee must compare the analytical report results with the NBC's effluent discharge limitations listed in Table 1. If there are any violations of the NBC's standards, the permittee must notify the NBC within twenty-four (24) hours of becoming aware of the violation by contacting pretreatment staff at 461-8848 or by using the twenty-four (24) hour violation notification FAX form and must resample and analyze for the parameter(s) in violation of the NBC's standards, excluding BOD, TSS and pH. The resampling results must be received by the NBC no later than thirty (30) days following the date that the permittee became aware of the initial violation of the standards.
6. The NBC may, at any time, require more frequent monitoring than specified in this permit. Conditions that may result in the imposition of more frequent monitoring include, but are not limited to, the following:
 - a. Failure to meet effluent limitations;
 - b. Change in production processes;
 - c. Expansion or reduction of production;
 - d. Change in water usage;
 - e. Discovery of additional information on monitoring or production unavailable to the NBC at the time this permit was prepared.

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. A listing of all transfers from Tank 602 to the precious metal recovery tank, including the date of the transfer and volume;
 - f. The amount of chemicals added to provide pretreatment of batch discharges;
 - g. pH readings taken during the course of providing batch treatment of any process wastewater and the amount of sludge generated, where applicable;
 - h. 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 each boiler facility blowdown visual inspection documenting the date, time, person conducting the blowdown and the appearance of the blowdown. This procedure ensures that a prohibited material is not discharged.

3. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

I. Spill and Slug Prevention Control Plan:

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

J. Toxic Organic/Solvent Management Plan:

The permittee must ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

K. Emergency/Routine Notification Requirements:

1. Emergency Notification of Accidental/Incidental Discharge

In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR §403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 222-6781. Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. pH monitoring equipment failure;
- b. pH probe failure;
- c. pH chart recorder failure;
- d. Chemical feed pump failure;
- e. Pretreatment system pump, filter, or mixer failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

L. Right of Entry:

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

M. Permit Fee:

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G. L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

N. Authorization To Do Business:

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Armbrust International, Ltd. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Armbrust International, Ltd. 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 Armbrust International, Ltd. 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 Armbrust International, Ltd. shall be subject to the terms and conditions of the permit as if named herein.

O. Closing, Selling, Moving the Business:

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

P. Transfer of Permit Prohibited:

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

Q. Permit Violations:

1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

R. Revocation/Suspension of Permit:

1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:
 - a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
 - b. Failure to report changes in operations or wastewater constituents;
 - c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;

- d. Failure to adhere to an approved compliance schedule;
- e. Failure to comply with administrative orders or settlement agreements;
- f. Failure to pay authorized fees and user charges;
- g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

S. Civil and Criminal Liability:

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

T. Duty to Comply:

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

U. Removed Substances:

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

V. Permit Modification/Renewal:

1. This permit may be modified for various reasons, including but not limited to the following:
 - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
 - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
 - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
 - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;
 - e. Violation of any terms or conditions of the permit;
 - f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
 - g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
 - h. To correct typographical or other errors in the permit;
 - i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;
 - j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

W. Integration:

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

X. Jurisdiction:

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

IEJ:NJD:smb

Attachments:

- Self-Monitoring Compliance Report Form
- Continuous pH Monitoring Report Form
- Designation of Authorized Agent Form
- RCRA Handbook
- Twenty-four (24) Hour Violation Notification Fax Form
- List of Licensed Laboratories
- List of Toxic Organic Compounds

Table 1

NBC Effluent Discharge Limitations
Field's Point District

<u>Parameter</u>	<u>Limitation (Max)</u>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD ₅)	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.

<u>Parameter</u>	Daily Maximum Composite for 1 day (mg/l)	Average 10 day (mg/l)
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

Armbrust International, Ltd.
Sampling Requirements

Sample Location #1		
The Discharge Baffle of the pH Adjustment Tank		
Month	Composite Sample	Parameters
January	X	Cu, Ni, Ag, Zn, CN
February	X	Cu, Ni, Ag, Zn, CN
March	X	Cu, Ni, Ag, Zn, CN
April	X	Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN
May	X	Cu, Ni, Ag, Zn, CN
June	X	Cu, Ni, Ag, Zn, CN
July	X	Cu, Ni, Ag, Zn, CN
August	X	Cu, Ni, Ag, Zn, CN
September	X	Cu, Ni, Ag, Zn, CN
October	X	Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN
November	X	Cu, Ni, Ag, Zn, CN
December	X	Cu, Ni, Ag, Zn, CN

Legend

Cd - Cadmium Pb - Lead
Cr - Chromium Ni - Nickel
Cu - Copper Ag - Silver
CN - Cyanide Zn - Zinc

CERTIFICATE TO DISCHARGE

the following types of process water:

TREATED METAL FINISHING WASTEWATERS AND BOILER BLOWDOWN DISCHARGES

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

Armbrust International, Ltd.

735 Allens Avenue

Providence, RI 02905

PERMIT NUMBER: P1112-237-0221

PERMIT EXPIRATION DATE: 02/28/2021

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 19, 2016
Initial Date of Issuance

/s/ Kerry M. Britt
Kerry M. Britt, Pretreatment Manager

***TYPICAL PHARMACEUTICAL
WASTEWATER DISCHARGE PERMIT***



WASTEWATER DISCHARGE PERMIT

Permit Number: B1404-014-0417

Company Name: **TEDOR PHARMA, INC.**

Facility Address: 400 Highland Corporate Drive, Cumberland, RI 02864

Mailing Address: 400 Highland Corporate Drive, Cumberland, RI 02864

Facility President: Mr. Theodore Iorio

Facility Authorized Agents: Robert F. Ferrari, P.E., Mr. Matthew Iorio

User Classification: Pharmaceutical Manufacturer

Categorical Standards Applicable: 40 CFR §439.47, Pretreatment Standards for New Sources

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Mr. Theodore Iorio and Tedor Pharma, Inc.**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 23 pages with conditions A - V.

**This permit is effective on May 1, 2012
and expires on April 30, 2017.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission**:

/s/ Kerry M. Britt
Kerry M. Britt, Pretreatment Manager
Narragansett Bay Commission

April 27, 2012
Date

NOTE: The NBC will accept the person(s) named on this permit as the **Permittee's** authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the **Permittee's** by-laws or per a vote of the directors if the **Permittee** is a corporation; a general partner or proprietor if the **Permittee** is a partnership or sole proprietorship respectively; or a duly authorized representative of an individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the **Permittee**. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

CONDITIONS TO PERMIT

A. Effluent Discharge Limitations:

1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 17, attached hereto and incorporated herein.
2. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
3. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
4. The permittee is classified as a pharmaceutical manufacturing firm and therefore must at all times comply with EPA Categorical Regulations 40 CFR §439.47, Subpart D, Pretreatment Standards for New Sources. EPA regulations require pharmaceutical manufacturers to maintain full compliance with the maximum daily discharge limit of 20.7 mg/L and the monthly average of 8.2 mg/L for acetone, n-amyl acetate, ethyl acetate, and isopropyl acetate. Subpart D of the pharmaceutical regulations also requires categorical pharmaceutical manufacturers to maintain full compliance with the maximum daily discharge limit of 3.0 mg/L and the monthly average limit of 0.7 mg/L for methylene chloride. Table 2 summarizes these Pretreatment Standards. NBC discharge limits for the Bucklin Point Treatment Facility do not exist for n-amyl acetate, ethyl acetate, and isopropyl acetate. The categorical limits are therefore in effect for these parameters. Methylene chloride and acetone are included in the NBC's list of Total Toxic Organics and must meet the more stringent local limit of 2.13 mg/L. NBC discharge limits for all other parameters in this permit are more stringent than the EPA's categorical limitations. Therefore, NBC local limits will be applied and enforced for all other parameters.

B. Permitted Discharges:

1. The permittee is authorized to discharge the following tanks, solutions, or process wastewater streams to the NBC's facilities:
 - a. Treated Washwater from Pharmaceutical Manufacturing Equipment;
 - b. Wastewater from Pharmaceutical Research Operations;
 - c. Glass Washing Wastewater;
 - d. Laboratory Equipment, Floor, and Wall Washwater.

2. The permittee may discharge laboratory chemicals/solutions and washings from laboratory glassware, as identified in Section B(1)(b and c) above, provided that:
 - a. The chemicals/solutions are discharged on an as generated basis;
 - b. The discharge criteria listed in Table 1 are met at the source without dilution;
 - c. The chemical solutions are not and do not contain Toxic Pollutants (reference Table 4) in concentrations that would violate the NBC discharge limitations specified in Table 1 of this Permit;
 - d. The chemicals/solutions are not and do not contain mutagens, teratogens and/or carcinogens.
3. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

C. Prohibitions:

1. The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
 - a. Product Solutions;
 - b. Raw Materials;
 - c. Off-Specification Product;
 - d. Cyanide Solutions;
 - e. Acidic Solutions with a pH less than 5.0 standard units;
 - f. Caustic Solutions with a pH greater than 11.0 standard units;
 - g. Degreasing Solutions;
 - h. Solvents;
 - i. Sludges;
 - j. Fuel or Lubricating Oils.
2. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) and Section B(2) of this permit or wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 17 and in Table 2 on page 18, attached hereto and incorporated herein.
3. The permittee may only treat and/or discharge those solutions that were indicated as such on plans received by the NBC from the permittee on May 7, 2003, July 14, 2005, and October 25, 2007. The permittee is strictly prohibited from discharging any other tanks, solutions, chemicals, or materials, including all prohibited substances as defined in the Rules and Regulations of the Narragansett Bay Commission, without written approval from the NBC.

4. The permittee is strictly prohibited from using portable pumps and/or flexible hose to transfer solutions directly to the pretreatment system or to bypass the pretreatment system and/or discharge solutions directly to the sewer without written approval from the NBC.
5. Non-sanitary discharges other than those specified in Section B of this permit are prohibited unless specifically approved by the NBC in writing.
6. Discharging of chemicals or solutions containing materials listed in the attached List of Toxic Pollutants (Table 4) is strictly prohibited if said discharge would result in violation of NBC limitations in Table 1.
7. The permittee is prohibited from discharging the following materials, solutions, and/or process wastewater streams to the NBC's facilities:
 - a. Isolation waste may not be discharged to the sewer;
 - b. Human body parts and tissues may not be discharged to the sewer system;
 - c. Discarded cultures and stocks of infectious agents and associated biologicals may not be discharged to the sewer.

Refer to Table 5 and Appendix I for isolation and oncological waste definitions.

D. Pretreatment Requirements:

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of one (1) sample location must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - Sample port on the discharge line of the Wastewater Storage Tank T-101, collecting all process discharges specified in Section B(1)(a) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Location #1 must be in compliance with the effluent limitations specified in Section A, Table 1, Table 2, and with the EPA Pharmaceutical Manufacturing Standards referenced in Section A(4) of this permit.

2. The permittee shall operate and maintain a pretreatment system in conformance with plans received by the NBC on May 7, 2003, July 14, 2005, and April 19, 2007. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.
3. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.

E. Monitoring Requirements:

1. The permittee shall monitor the pH of the effluent discharge and record it continuously. The permittee shall report the results monthly in a summary report giving the maximum, minimum, average pH readings, and volume of each batch discharge (see sample copy enclosed). The data must be reported directly from the recording chart to an accuracy of 0.1 standard units. The pH Monitoring Report must be received by the NBC within thirty (30) days from the end of the month in which the data is recorded. The original recording chart must be maintained on site for a period of at least three (3) years.
2. During the months of January, April, July, and October, until the expiration date of this permit, the permittee shall conduct sampling of one batch discharge from the sample port on the discharge line of Wastewater Storage Tank T-101, Sample Location #1, after treatment and just prior to discharge. The permittee shall collect seven grab samples from the same batch discharge. The grab samples must be analyzed separately.
 - a. The first grab sample is to be collected in a glass container having a total volume greater than 20 ml. The grab sample must be preserved immediately upon sample collection in accordance with EPA Regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If the sample is known to contain residual chlorine, add sodium thiosulfate preservative (10 mg/40ml) to the empty sample bottles just prior to shipment to the sample site. If the sample is tested and residual chlorine is present then 0.008% by volume of sodium thiosulfate must be added (i.e., 2 mg per 25 ml of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate should be repeated. Once chlorine residual has been eliminated from the sample, the sample should be stored in the dark and refrigerated at a temperature of 0-4° C until analysis. No air bubbles may be present in any grab sample or that sample must be discarded. The grab sample is to be analyzed within fourteen (14) days of collection by EPA Method 1666 for the following **Volatile Organic Compounds** specific to the Pharmaceutical Manufacturing Industry:

n-Amyl acetate
Ethyl acetate
Isopropyl acetate

- b. The second grab sample is to be collected, preserved, and analyzed in accordance with analytical method number D3695, D4763, 524.2, or 1624 and with EPA protocols for the following parameter:

Acetone

- c. The third grab sample consisting of at least 1000ml (1L) is to be collected in a glass bottle with a Teflon lined cap with a volume of either 25 or 40 ml. The grab sample must be preserved immediately upon sample collection in accordance with EPA Regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If residual chlorine is present in the sample, then 0.008% by volume of sodium thiosulfate must be added (i.e. 2 mg per 25 ml of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate should be repeated. Once chlorine residual has been eliminated from the sample, the sample should be stored in the dark and refrigerated at a temperature of 0-4° C until analysis. No air bubbles may be present in the grab sample or that sample must be discarded. The grab sample is to be analyzed within three (3) days of collection for the **Volatile Organic Compounds (purgeables)** fraction of the Total Toxic Organics (TTO) list enclosed.
- d. The fourth grab sample consisting of at least 1000ml (1L) is to be collected for analysis in a glass amber bottle with a Teflon lined cap. The grab sample must be preserved immediately upon sample collection according to EPA Regulations. The sample must be tested for residual chlorine with potassium iodide paper. If chlorine residual is present in the sample, 0.008% by volume of sodium thiosulfate must be added (i.e. 80 mg per liter of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate shall be repeated. Once chlorine residual has been eliminated from the sample, the pH of the sample must be adjusted to between 6.0 and 9.0 standard units and the sample must be stored in the dark until analysis. The sample must be extracted within seven (7) days of collection and must be analyzed within forty (40) days of extraction for the **Acid, Base and Neutral fraction** of the Total Toxic Organics (TTO) list enclosed.
- e. The fifth grab sample is to be collected in a glass bottle. The sample must be collected and preserved according to EPA protocols and must be analyzed for the following parameter:

Total Oil and Grease (fats, oils, and grease)

- f. The sixth grab sample is to be collected, preserved, and analyzed according to EPA protocols for the following parameters:

Biochemical Oxygen Demand (BOD)
Total Suspended Solids (TSS)

- g. The seventh grab sample is to be collected, preserved, and analyzed according to EPA protocols for the following parameters:

Cadmium (Total)

Copper (Total)

Zinc (Total)

If the tank is not discharged during the required sampling month, the permittee must notify the NBC in writing and sample during the next discharge of the tank.

Table 3 attached hereto summarizes the sampling requirements for this facility.

3. All water meters measuring flows, which ultimately discharge to the sampling locations specified previously, are to be read at the start of sampling and at the end of sampling. These readings and the resultant total flow are to be submitted with the sampling results.
4. The analytical results for each sampling month listed above must be received by the NBC within thirty (30) days after the end of the month in which the samples are to be collected. All sampling and analyses are to be done in accordance with EPA approved procedures (40 CFR §403 and 40 CFR §136). The permittee must complete and submit a Self-Monitoring Compliance Report (copy enclosed) with each certified laboratory analysis sheet including chain of custody documentation. The laboratory analysis report must indicate the EPA approved test procedure for each parameter listed. All Self-Monitoring Compliance Reports must be signed by the permittee or authorized agent and certify that the information submitted is accurate and complete to the best of their knowledge.
5. The permittee must compare the analytical report results with the NBC's effluent discharge limitations listed in Table 1. If there are any violations of the NBC's standards, the permittee must notify the NBC within twenty-four (24) hours of becoming aware of the violation by contacting pretreatment staff at 461-8848 or by using the twenty-four (24) hour violation notification FAX form and must resample and analyze for the parameter(s) in violation of the NBC's standards, excluding BOD, TSS and pH. The resampling results must be received by the NBC no later than thirty (30) days following the date that the permittee became aware of the initial violation of the standards.
6. The NBC may, at any time, require more frequent monitoring than specified in this permit. Conditions that may result in the imposition of more frequent monitoring include, but are not limited to, the following:
 - a. Failure to meet effluent limitations;
 - b. Change in production processes;
 - c. Expansion or reduction of production;
 - d. Change in water usage;
 - e. Discovery of additional information on monitoring or production unavailable to the NBC at the time this permit was prepared.

F. Record Keeping Requirements:

1. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the operation of the pretreatment system including, but not limited to, the following:
 - a. Completed manifest forms for hazardous materials;
 - b. A listing of all batch discharges including the date of the discharge and a description of the tank from which the discharge occurred;
 - c. The amount of chemicals added to provide pretreatment of batch discharges;
 - d. pH readings taken during the course of providing batch treatment of any process wastewater and the amount of sludge generated, where applicable;
 - e. Maintenance performed on the pretreatment system including weekly probe cleaning, monthly probe calibration and other maintenance requests specified by inspectors of the NBC.

2. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

G. Spill and Slug Prevention Control Plan:

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

H. Toxic Organic/Solvent Management Plan:

The permittee must ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

I. Emergency/Routine Notification Requirements:

1. Emergency Notification of Accidental/Incidental Discharge

In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR 403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 434-6350. Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. pH monitoring equipment failure;
- b. pH probe failure;
- c. Chemical feed pump failure;
- d. Pretreatment system pump, filter, or mixer failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

J. Right of Entry:

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

K. Permit Fee:

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

L. Authorization To Do Business:

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Tedor Pharma, Inc. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Tedor Pharma, Inc. has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Tedor Pharma, Inc. is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-permittee or any individual exercising ownership of Tedor Pharma, Inc. shall be subject to the terms and conditions of the permit as if named herein.

M. Closing, Selling, Moving the Business:

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

N. Transfer of Permit Prohibited:

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

O. Permit Violations:

1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

P. Revocation/Suspension of Permit:

1. Violations of the conditions of this permit, the NBC's Rules and Regulations, Act, and applicable state or Federal regulations may result in the revocation of this permit in accordance with the due process requirements of the NBC's Rules and Regulations. Violations that may result in revocation of this permit include, but are not limited to, the following:

- a. Failure to accurately report the wastewater constituents and characteristics of the discharge;
- b. Failure to report changes in operations or wastewater constituents;
- c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;
- d. Failure to adhere to an approved compliance schedule;
- e. Failure to comply with administrative orders or settlement agreements;
- f. Failure to pay authorized fees and user charges;
- g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

Q. Civil And Criminal Liability:

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

R. Duty To Comply:

1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

S. Removed Substances:

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

T. Permit Modification/Renewal:

1. This permit may be modified for various reasons, including but not limited to the following:
 - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
 - b. Material or substantial alterations or additions to permittee's process operations, discharge volume or discharge characteristics which were not considered in the drafting of this permit;
 - c. A change in any condition regarding either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
 - d. Information indicating that the permitted discharge poses a threat to the NBC collection or treatment system, POTW personnel, the general public, or the receiving waters;
 - e. Violation of any terms or conditions of the permit;
 - f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting;
 - g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR §403.13;
 - h. To correct typographical or other errors in the permit;
 - i. To reflect transfer of the facility ownership and/or operation to a new owner/operator;
 - j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

U. Integration:

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

V. Jurisdiction:

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

IEJ:NJD:smb

Attachments:

- Self Monitoring Compliance Report Form
- Batch pH Monitoring Report Form
- Designation of Authorized Agent Form
- RCRA Handbook
- Twenty-four (24) Hour Violation Notification Fax Form
- List of Licensed Laboratories

Table 1

NBC Effluent Discharge Limitations
Bucklin Point District

<u>Parameter</u>	<u>Limitation (Max)</u>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD ₅)	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.

<u>Parameter</u>	<u>Daily Maximum Concentration Limit (mg/l)</u>	<u>Monthly Average Concentration (mg/l)</u>
Arsenic (Total)	0.20	0.10
Cadmium (Total)	0.11	0.07
Chromium (Total)	2.77	1.63
Copper (Total)	1.20	1.20
Cyanide (Total)	0.50	0.50
Lead (Total)	0.69	0.29
Mercury (Total)	0.06	0.03
Nickel (Total)	1.62	1.62
Selenium (Total)	0.40	0.20
Silver (Total)	0.40	0.20
Tin	4.00	2.00
Zinc (Total)	1.67	1.39

All limitations are in units of mg/l unless otherwise specified.

* Exceeding this discharge limitation may be permitted but would be subject to a surcharge in accordance with rates approved by the Public Utilities Commission and in accordance with R.I.G.L. §39-1-1 et seq.

Table 2

Tedor Pharma, Inc.

Pharmaceutical Manufacturing
Pretreatment Standards for New Sources (PSNS)
40 CFR §439.47

Subpart D		
PSNS for Mixing, Compounding, and Formulating Subcategory D		
Pollutant or Pollutant Property	Maximum for Any One Day (mg/L)	Maximum for Monthly Average (mg/L)
n-Amyl acetate	20.7	8.2
Ethyl acetate	20.7	8.2
Isopropyl acetate	20.7	8.2
Acetone*	20.7	8.2
Methylene Chloride*	3.0	0.7

* Must meet the combined total TTO discharge limit of 2.13 mg/l.

Table 3

Tedor Pharma, Inc.
Sampling Requirements

Sample Location #1		
Sample Port on the Discharge Line of Wastewater Storage Tank, T-101		
Month	Grab Sample*	Parameters
January	X	Cd, Cu, Zn, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Acetone, Methylene Chloride, VOC, EXT, BOD, TSS
February		
March		
April	X	Cd, Cu, Zn, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Acetone, Methylene Chloride, VOC, EXT, BOD, TSS
May		
June		
July	X	Cd, Cu, Zn, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Acetone, Methylene Chloride, VOC, EXT, BOD, TSS
August		
September		
October	X	Cd, Cu, Zn, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Acetone, Methylene Chloride, VOC, EXT, BOD, TSS
November		
December		

Legend

Cd – Cadmium Pb - Lead BOD - Biochemical Oxygen Demand
Cr – Chromium Ni - Nickel TSS - Total Suspended Solids
Cu – Copper Ag - Silver TTO - Total Toxic Organic Compounds
CN – Cyanide Zn - Zinc VOC - Volatile Organic Compounds Portion of TTO List
EXT - Extractable Portion of TTO List

*These grab samples are to be collected after treatment and just prior to discharge.

Table 4

List of Toxic Pollutants

The following list of Toxic Pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act.

VOLATILES EPA METHOD 624	BASE/NEUTRAL - EPA METHOD 625	PESTICIDES - EPA METHOD 625
acrolein	acenaphthene *	aldrin
acrylonitrile	acenaphthylene *	alpha-BHC
benzene	anthracene *	beta-BHC
bromoform	benzidine	gamma-BHC
carbon tetrachloride	benzo (a) anthracene *	delta-BHC
chlorobenzene	benzo (a) pyrene *	chlordane
chlorodibromomethane	3,4-benzofluoranthene *	4,4'-DDT
chloroethane	benzo (ghi) perylene *	4,4'-DDE
2-chloroethylvinyl ether	benzo (k) fluoranthene	4,4'-DDD
chloroform	bis (2-chloroethoxy) methane	dieldrin
dichlorobromomethane	bis (2-chloroethyl) ether	alpha-endosulfan
1,1-dichloroethane	bis (2-chloroisopropyl) ether	beta-endosulfan
1,2-dichloroethane	bis (2-ethylhexyl) phthalate	endosulfan sulfate
1,1-dichloroethylene	4-bromophenyl phenyl ether	endrin
1,2-dichloropropane	butylbenzyl phthalate	endrin aldelyde
1,3-dichloropropylene	2-chloronaphthalene	heptachlor
ethylbenzene	4-chlorophenyl phenyl ether	heptachlor epoxide
methyl bromide	chrysene *	PCB-1242
methyl chloride	dibenzo (a,h) anthracene *	PCB-1254
methylene chloride	1,2-dichlorobenzene	PCB-1221
1,1,2,2-tetrachloroethane	1,3-dichlorobenzene	PCB-1232
tetrachloroethylene	1,4-dichlorobenzene	PCB-1248
toluene	3,3'-dichlorobenzidine	PCB-1260
1,2-trans-dichloroethylene	diethyl phthalate	PCB-1016
1,1,1-trichloroethane	dimethyl phthalate	toxaphene
1,1,2-trichloroethane	di-n-butyl phthalate	
trichloroethylene	2,4-dinitrotoluene	
vinyl chloride	2,6-dinitrotoluene	
	di-n-octyl phthalate	
	1,2-diphenylhydrazine	
	(as asobenzene)	
	fluoranthene *	
	fluorene *	
	hexachlorobenzene	
	hexachlorobutadiene	
	hexachlorocyclopentadiene	
	hexachloroethane	
	indeno (1,2,3-cd) pyrene *	
	isophorone	
	naphthalene *	
	nitrobenzene	
	N-nitrodimethylamine	
	N-nitrosodi-n-propylamine	
	N-nitrosodiphenylamine	
	phenanthrene *	
	pyrene *	
	1,2,4-trichlorobenzene	
	* = Polynuclear Aromatic Hydrocarbons	
ACID COMPOUNDS - EPA METHOD 625		OTHER TOXIC POLLUTANTS AND TOTAL PHENOL
2-chlorophenol		Antimony, Total
2,4-dichlorophenol		Arsenic, Total
2,4-dimethylphenol		Beryllium, Total
4,6-dinitro-o-cresol		Cadmium, Total
2,4-dinitrophenol		Chromium, Total
2-nitrophenol		Chromium, Hexavalent
4-nitrophenol		Copper, Total
p-chloro-m-cresol		Lead, Total
pentachlorophenol		Mercury, Total
phenol		Nickel, Total
2,4,6-trichlorophenol		Selenium, Total
		Silver, Total
		Thallium, Total
		Zinc, Total
		Asbestos
		Cyanide, Total
		Phenols, Total
		TCDD (Dioxin)

Table 5

Definitions

1. **Biologicals** mean preparations made from living organisms and their products, including vaccines, cultures, etc., intended for used in diagnosing, immunizing or treating humans or animals or in research pertaining thereto.
2. **Blood Products** means any product derived from human blood, including but not limited to blood plasma, platelets, red or white blood corpuscles, and other derived licensed products, such as interferon, etc.
3. **Body Fluids** means liquid emanating or derived from humans and limited to blood; cerebrospinal, synovial, pleural, peritoneal and pericardial fluids; dialysate and amniotic fluids; and semen and vaginal secretions but excluding feces, urine, nasal secretions, sputum, sweat, tears, vomitus, saliva, and breast milk, unless any such excluded substance contains visible blood or is isolation waste.
4. **Contaminated Animal Carcasses, Body Parts and Bedding** - Body parts and bedding of animals that were exposed to infectious agents in research.
5. **Contaminated Sharps** - Discarded sharps (i.e. hypodermic needles, syringes, pasture pipettes, broken glass, scalpel blades, etc.) that may have come into contact with infectious agents.
6. **Contaminated Wastes from Surgical and Autopsy Procedures** - All soiled dressing, sponges, drapes, lavage tubes, surgical gloves, drainage sets, etc., that have come in contact with patient tissues, blood, body fluids, secretions, and excretions.
7. **Dialysis Unit Wastes** - Wastes that have come in contact with the blood of patients undergoing hemodialysis. Types of waste include contaminated disposal equipment and supplies such as tubing, filters, sheets, towels, gloves, etc.
8. **Discarded Cultures and Stocks of Infectious Agents and Associated Biologicals** - Cultures of specimens from medical/clinical and pathological laboratories, cultures and stocks of infectious agents, wastes from production of biologicals, discarded live and attenuated vaccines.
9. **Infectious Agent** - Any organism, such as a virus or a bacteria, that is capable of being communicated by invasion and multiplication in body tissues and capable of causing disease or adverse health impacts in humans.
10. **Isolation Wastes** - Biological waste and discarded materials contaminated with blood, excretion, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases. A list of these diseases may be found in Appendix I.
11. **Medical Waste** means any solid waste which is generated in the diagnosis, treatment, (i.e. provision of medical services), or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals.
12. **Oncological Waste** - Wastes discarded from the preparation and/or administration of those classes of drugs used in chemotherapy, i.e. antineoplastic and cytotoxic agents.
13. **Pathological Wastes** - Tissues and body parts, including body fluids removed during surgery and/or autopsy.
14. **Regulated Medical Waste** - A special category of solid waste that includes specific types of medical waste that includes solid, semisolid, or liquid materials, but does not include domestic sewage materials. This waste is subject to the handling and tracking requirements of RI DEM. Categories of regulated medical waste are defined below as blood products, body fluids, contaminated sharps, discarded cultures and stocks of infectious agents and associated biologicals, isolation wastes, pathological waste and oncological waste.

Appendix I

List of Diseases Associated with Isolation Wastes

- A. Biological waste and discarded materials contaminated with blood, excretion, exudates or secretions from humans who are isolated to protect others from certain highly communicable diseases.

The following viral diseases are included in the list of "highly communicable diseases" associated with the class of Isolation Wastes. Unless otherwise noted, these diseases have been taken from Classification 4 of the Center for Disease Control's (CDC) 1974 document "Classification of Etiologic Agents on the Basis of Hazard".

<u>Infectious Agent</u>	<u>Disease</u>
* Variola minor	Alastrim
* Variola major	Small Pox
* Whitepox	
* Monkey Pox	Human Monkeypox
** Crimean (congo) hemorrhagic fever virus	Crimean hemorrhagic fever
** Junin virus	Argentine hemorrhagic fever
** Machupo virus	Bolivian hemorrhagic fever
Herpesvirus simiae (Monkey B)	Oncogenic in primates
Lassa virus	Lassa fever
Marburg virus	Marburg virus disease
Russian spring-summer Encephalitis virus	Russian spring-summer Encephalitis
Kyasanur forest disease virus	Kyasanur forest disease
Omsk hemorrhagic fever virus	Omsk hemorrhagic fever
Central European encephalitis	Central European encephalitis
* Venezuelan equine encephalitis virus	Venezuelan equine encephalitis
* Yellow fever virus	Yellow fever
*** Ebola virus	Ebola virus disease
*** Absettarov virus	Tick-borne encephalitis
*** Hanzalova virus	Tick-borne encephalitis
*** Hyper virus	Tick-borne encephalitis
*** Kumlinge virus	Tick-borne encephalitis

* When used for transmission or animal inoculation experiments.

** CDC has noted that the above listed viruses in the hemorrhagic fever group and other viruses in this group, that are not yet identified, are also classified as Class 4.

*** CDC/NIH have included these diseases in Class 4 of their 1988 document "Biosafety in Microbiological and Biomedical laboratories". This document is an update of the 1974 publication.

B. Isolated animals known to be infected with highly communicable diseases.

The following diseases are included in the list of "highly communicable diseases" associated with animals. Unless otherwise noted by an asterisk, these diseases are part of the National Notifiable Disease Surveillances System List:

- Anthrax
- Botulism
- Brucellosis
- Eastern Equine Encephalitis
- Leptospirosis
- Lyme Disease
- Plague
- Psittacosis (Chlamyudiosis)
- Rabies
- Salmonellosis
- Trichinosis
- Tuberculosis
- Tularemia
- * Cat-Scratch Fever Disease
- * Ebola Virus
- * Ehrlichia Canis
- ** Encephalomyocarditis
- * Monkey B-Virus
- * Monkey Marburg Virus
- * Poxvirus
- * "Q" fever
- * Rocky Mountain Spotted Fever
- * Vesicular Stomatitis

CERTIFICATE TO DISCHARGE

the following types of process water:

PHARMACEUTICAL RESEARCH AND MANUFACTURING WASTEWATER

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

Tedor Pharma, Inc.

400 Highland Corporate Drive

Cumberland, RI 02864

PERMIT NUMBER: B1404-014-0417

PERMIT EXPIRATION DATE: 04/30/2017

The discharge permit must be kept at the above address for inspection. Failure to comply with the rules and regulations of the Narragansett Bay Commission or with the conditions of the discharge permit will subject the permittee to fines of up to \$25,000 per violation per R.I.G.L. 46-25-25.3.

April 27, 2012

Initial Date of Issuance

/s/ Kerry M. Britt

Kerry M. Britt, Pretreatment Manager

***TYPICAL METAL FORMER
WASTEWATER DISCHARGE PERMIT***



WASTEWATER DISCHARGE PERMIT

Permit Number: B1506-016-0418

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

<u>Parameter</u>	<u>Limitation (Max)</u>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD ₅)	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.

<u>Parameter</u>	Daily Maximum Concentration Limit (<u>mg/l</u>)	Monthly Average Concentration (<u>mg/l</u>)
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

Parameter	Daily Max. (mg/L)	Monthly Average (mg/L)
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 Agents: Mr. Todd Annarummo; Mr. Michael Baier; Ms. Susan Flash

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

<u>Parameter</u>	<u>Limitation (Max)</u>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD ₅)	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.

<u>Parameter</u>	Daily Maximum Concentration Limit (<u>mg/l</u>)	Monthly Average Concentration (<u>mg/l</u>)
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

Volatiles	Base/Neutral	Pesticides
Acrolein	Acenaphthene*	aldrin
Acrylonitrile	Acenaphthylene*	alpha – BHC
Benzene	Anthracene*	beta – BHC
Bromoform	Benzidine	gamma – BHC
carbon tetrachloride	benzo (a) anthracene*	delta – BHC
Chlorobenzene	benzo (a) pyrene*	chlordan
Chlorodibromomethane	3,4-benzofluoranthene*	4,4' – DDT
Chloroethane	benzo (ghi) perylene*	4,4' – DDE
2-chloroethylvinyl ether	benzo (k) fluoranthene	4,4' – DDD
Chloroform	Bis (2-chloroethoxy) methane	dieldrin
Dichlorobromomethane	Bis (2-chloroethyl) ether	alpha-endosulfan
1,1-dichloroethane	Bis (2-chloroisopropyl) ether	beta-endosulfan
1,2-dichloroethane	Bis (2-ethylhexyl) phthalate	endosulfan sulfate
1,1-dichloroethylene	4-bromophenyl phenyl ether	endrin
1,2-dichloropropane	butylbenzyl phthalate	endrin aldehyde
1,3-dichloropropylene	2-chloronaphthalene	heptachlor
Ethylbenzene	4-chlorophenyl phenyl ether	heptachlor epoxide
methyl bromide	Chrysene*	toxaphene
methyl chloride	dibenzo (a, h) anthracene*	
methylene chloride	1,2-dichlorobenzene	
1,1,2,2-tetrachloroethane	1,3-dichlorobenzene	Polychlorinated Biphenyls
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	Other Toxic Pollutants and
	(as azobenzene)	Total Phenol
	fluoranthene*	Antimony, Total
	fluorene*	Arsenic, Total
	hexachlorobenzene	Beryllium, Total
	hexachlorobutadiene	Cadmium, Total
	hexachlorocyclopentadiene	Chromium, Total
	hexachloroethane	Chromium, Hexavalent
	indeno (1,2,3-cd) pyrene*	Copper, Total
	isophorone	Lead, Total
	nitrobenzene	Mercury, Total
	n-nitrosodimethylamine	Nickel, Total
	n-nitrosodi-n-propylamine	Selenium, Total
	n-nitrosodiphenylamine	Silver, Total
	Phenanthrene*	Thallium, Total
	Pyrene*	Zinc, Total
	1,2,4-trichlorobenzene	Asbestos
	Naphthalene*	Cyanide, Total
		Phenols, Total
		TCDD (Dioxin)
	* = Polynuclear Aromatic Hydrocarbons	

Table 3

Pawtucket Power Associates, L.P.
Sampling Requirements

Month	Sample Location #1 Sample Port on the Effluent Discharge Pipe of the Oil/Water Separator				Sample Location #2 Final pH Adjustment Tank Sample Port		Sample Location #3 Sample Port on the Effluent Discharge Pipe of the Carbon Filter Backwash Line		Sample Location #4 Sample Port on the Discharge Pipe of the Cooling Tower	
	Composite Sample	Parameters	Grab Sample*	Parameters	Grab Sample	Parameters	Grab Sample	Parameters	Composite Sample	Parameters
January	X	Cd, Cr, Cu, Ni, Pb, Zn	X	O & G	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn
February										
March										
April	X	Cd, Cr, Cu, Ni, Pb, Zn	X	O & G	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn
May										
June										
July	X	Cd, Cr, Cu, Ni, Pb, Zn	X	O & G	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn
August										
September										
October	X	Cd, Cr, Cu, Ni, Pb, Zn	X	O & G	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn	X	Cd, Cr, Cu, Ni, Pb, Zn
November										
December										

Legend

Cd - Cadmium Pb - Lead O & G – Total Oil and Grease (fats, oils, and grease)
 Cr - Chromium Ni - Nickel
 Cu - Copper Ag - Silver
 CN - Cyanide Zn - Zinc

*These grab samples are to be collected on the same day that the composite sample is collected. Each grab must be collected, preserved, and analyzed separately.

Attachment A

Cooling Tower Chemical Certification

For the Month of _____, 20__

Company Name: _____

Address: _____

RETURN TO:

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

I, _____, as authorized representative of
_____, do hereby decree that the cooling
tower

chemicals used and the cooling tower chemical dosages were not altered in any way during the
past

month. I am aware that if the chemicals used or the additive dosages are altered, then an
engineering

study must be immediately conducted to demonstrate that the changes will not cause detectable
amounts of the 126 priority pollutants in the cooling tower blowdown.

I certify under penalty of law that this document and all attachments were properly prepared
under my direction or supervision in accordance with a system designed to assure that qualified
personnel properly gather and evaluate the information submitted. Based on my inquiry of the
person or persons who manage the system, or those responsible for gathering the information,
the information submitted is, to the best of my knowledge and belief, true, accurate, and
complete. I am aware that there are significant penalties for submitting false information
including the possibility of fine and imprisonment for known violations.

Authorized Representative Signature

Date

CERTIFICATE TO DISCHARGE

the following types of process water:

STEAM ELECTRIC POWER GENERATING WASTEWATER

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

Pawtucket Power Associates, L.P.

181 Concord Street

Pawtucket, RI 02860

PERMIT NUMBER: B1604-007-0417

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 LANDFILL LEACHATE
FACILITY WASTEWATER
DISCHARGE PERMIT***



WASTEWATER DISCHARGE PERMIT

Permit Number: P3412-004-1019

Company Name: **RHODE ISLAND RESOURCE RECOVERY CORPORATION**

Facility Address: 65 Shun Pike, Johnston, R.I. 02919

Mailing Address: 65 Shun Pike, Johnston, R.I. 02919

Facility Executive Director: Mr. Michael O'Connell

Facility Authorized Agents: Mr. William Anderson, Mr. Peter Connell, Mr. Brian Card

User Classification: Landfill 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 Commission (NBC) District (Rules and Regulations), **Mr. Michael O'Connell**, in his capacity as Executive Director of Rhode Island Resource Recovery Corporation, and **Rhode Island Resource Recovery 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 23 pages with conditions A - U and Attachments 1 and 2.

**This permit is effective upon receipt
and expires on October 31, 2019.**

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

November 7, 2014
Date

Michael O'Connell, in his capacity as Executive Director of Rhode Island Resource Recovery Corporation, and Rhode Island Resource Recovery Corporation hereby consent to all requirements and wastewater discharge limitations detailed within this Wastewater Discharge Permit. In so consenting, the appropriate officers of Rhode Island Resource Recovery Corporation have personally read and understand each of the provisions and wastewater discharge limitations in this Wastewater Discharge Permit. This permit allows Rhode Island Resource Recovery Corporation to discharge sanitary and permitted discharges specified in Section B(1) of this permit from landfill operations to the Narragansett Bay Commission sewer system.

Michael O'Connell, Executive Director
Rhode Island Resource Recovery Corporation

Signature

Date

I have read and understood the NBC Rules and Regulations and the conditions and procedures contained in this permit.

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, and Table 2 on page 20, attached hereto and incorporated herein.
2. The Permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The Permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
3. The Permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
4. The Permittee shall not discharge more than 464,000 gallons per day. The Permittee shall not exceed a maximum discharge flow rate of 30,000 gallons per hour. The daily average flow rate shall not exceed 22,500 gallons per hour. The Permittee agrees not to exceed the specified maximum daily and hourly flow restrictions and must notify the NBC in advance of any exceedances of the aforementioned flow rates.
5. The Permittee shall comply with interim discharge limitations specified in this section. The NBC may revise the interim limitations at any time. The NBC is performing a local discharge limitation analysis to determine parameter concentrations that will replace the interim limitations. Until such time the local discharge limitations for the Field's Point district are established by the NBC and approved by the DEM, the Permittee must comply with the interim limitations in effect. The Permittee shall comply with the following interim discharge limitations:

	<u>Daily Maximum Limitation</u>	<u>Monthly Average</u>
Arsenic (Total)	0.60 mg/L	0.40 mg/L
Ammonia*	5.0 mg/L	
Nitrate + Nitrite*	10.0 mg/L	
Non-Biodegradable Organic Nitrogen*	100.0 mg/L	

*The interim effluent discharge limitations for Ammonia, Nitrate+Nitrite and Non-Biodegradable Organic Nitrogen are seasonal limitations. These interim limits are effective May 1st through October 31st of every year.

The interim discharge limitations are specified in Table 2 on page 20.

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 Landfill Leachate;
 - b. Treated Discharges from the OU1/Phase 1 Site;
 - c. Gas Line Condensate;
 - d. Oil/Water Separator Discharges.
2. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

C. Prohibitions:

1. The Permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
 - a. Electroplating Solutions;
 - b. Cyanide 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. Gasoline;
 - j. Benzene;
 - k. Radioactive Wastes;
 - l. Hazardous Wastes;
 - m. Trucked or hauled waste of any type.
2. The Permittee is strictly prohibited from accepting wastewater from the combustion condensate and gas conditioning and compression operations conducted by Rhode Island LFG Genco, LLC without receiving written approval from the NBC. The valve in Manhole Number 5 must remain locked out at all times.
3. The Permittee is strictly prohibited from accepting and treating wastewater from any other source or business through Pump Station #1 or the SBR pretreatment system without first obtaining written approval from the NBC on any such discharge.

4. New or existing companies located on Rhode Island Resource Recovery Corporation property are strictly prohibited from connecting to the NBC sewer system without obtaining a NBC Sewer Connection Permit or discharging to the NBC system via the Rhode Island Resource Recovery Corporation discharge system without prior NBC approval.
5. The Permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) of this permit or waste streams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 19, and Table 2 on page 20, attached hereto and incorporated herein.
6. 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 July 14, 2014, September 19, 2014, and September 26, 2014. 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.
7. The Permittee is strictly prohibited from using portable pumps and/or flexible hose to transfer solutions directly to the pretreatment system or to bypass the pretreatment system and/or discharge solutions directly to the sewer without written approval from the NBC.

D. Pretreatment Requirements:

1. The Permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of three 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 equalization tank, collecting all process discharges specified in Section B(1) (a and b) of this permit.

Sample Location #2 - Sample port on the discharge line of the oil/water separator located near the SBR Administration Building, collecting all process discharges specified in Section B(1)(c) of this permit.

Sample Location #3 - Interim Sample Location at Pump Station #1, collecting all process discharges specified in Section B(1)(a and b) of this permit.

The Permittee is prohibited from discharging dilution waste streams into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Locations #1, #2 and #3 must be in compliance with the effluent limitations specified in Section A, Table 1 and Table 2 of this permit.

2. The Permittee shall install, operate, and maintain pretreatment systems in conformance with plans submitted to the NBC on July 14, 2014, September 19, 2014, and September 26, 2014. The sequencing batch reactor pretreatment system shall be fully operational by April 30, 2015.
3. The Permittee shall add a carbon source to the SBR pretreatment system throughout April of each year to accelerate biological nutrient removal processes and shall operate the system to the fullest extent necessary to achieve and maintain compliance with the interim discharge limitations for nitrogen compounds specified in Table 2 of this permit.
4. The Permittee has installed a resettable magnetic water meter on Pump Station #1. This magnetic water meter will be used for NBC billing purposes and is prohibited from being reset by Rhode Island Resource Recovery Corporation. The reset code for the magnetic meter must be given solely to the NBC Customer Service Section. This meter is approved for billing purposes from the effective date of this permit until the SBR pretreatment system is operational. A mechanical, non-resettable discharge meter is required to be installed on the discharge line of the SBR pretreatment system.
5. The Permittee is responsible for properly operating and maintaining the pretreatment systems 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 Permittee shall record the volume of landfill leachate discharged to the NBC sewer system on a daily basis on the pH Monitoring Report. 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. **Initial Start-Up Monitoring Requirements:** During the first full normal week of discharge into the NBC system, the Permittee shall conduct wastewater sampling on the first four (4) consecutive operating days from the Interim Sample Location at Pump Station #1, Sample Location #3. The samples must be collected, preserved, and analyzed separately in accordance with EPA protocols for the following parameters:

Metals:

Arsenic (Total)	Copper (Total)	Nickel (Total)
Cadmium (Total)	Lead (Total)	Silver (Total)
Chromium (Total)	Mercury (Total)	Zinc (Total)

Nitrogen Parameters:

Ammonia (Total)	Nitrate + Nitrite Total Nitrogen	Total Kjeldahl Nitrogen
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Other Parameters:

Cyanide
 Total Oil & Grease (fats, oils, and grease)
 Total Toxic Organics (TTO)
 Biochemical Oxygen Demand (BOD₅)
 Total Suspended Solids (TSS)

The sampling protocols for the parameters listed above are detailed in Attachment 1 of this permit.

The analytical results are to be received by the NBC by December 30, 2014. 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. **Intermediate Monitoring Requirements:** Effective December 2014 and continuing until the SBR pretreatment system becomes operational, the Permittee shall conduct composite sampling from the Interim Sample Location at Pump Station #1, Sample Location #3, one day each week for arsenic and nitrogen compounds and one day each month for the other parameters. Composite samples must be collected one day each week, preserved, and analyzed separately in accordance with EPA protocols for the following parameters:

Metals:

Arsenic (Total)*

Nitrogen Parameters:

Ammonia (Total)	Nitrate + Nitrite Total Nitrogen	Total Kjeldahl Nitrogen
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Samples must be collected one day each month, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Metals:

Cadmium (Total)	Lead (Total)	Nickel (Total)
Chromium (Total)	Mercury (Total)	Silver (Total)
Copper (Total)		Zinc (Total)

Other Parameters:

Cyanide
Total Oil & Grease (fats, oils, and grease)
Total Toxic Organics (TTO)
Biochemical Oxygen Demand (BOD₅)
Total Suspended Solids (TSS)

The sampling protocols for the parameters listed above are detailed in Attachment 1 of this permit.

*The sampling conducted for the Arsenic Study may be used to satisfy the weekly sampling requirements for Arsenic (Total).

Table 3 attached hereto summarizes the sampling requirements for this facility for the period of December 2014 until the SBR pretreatment system is operational.

4. ***SBR Pretreatment System Start-Up Monitoring Requirements:*** During the first full normal week of operations of the SBR pretreatment system, the Permittee shall conduct wastewater sampling on the first four (4) consecutive operating days from the sample port on the discharge line of the final equalization tank, Sample Location #1. The samples must be collected, preserved, and analyzed separately in accordance with EPA protocols for the following parameters:

Metals:

Arsenic (Total)	Copper (Total)	Nickel (Total)
Cadmium (Total)	Lead (Total)	Silver (Total)
Chromium (Total)	Mercury (Total)	Zinc (Total)

Nitrogen Parameters:

Ammonia (Total)	Nitrate + Nitrite Total Nitrogen	Total Kjeldahl Nitrogen
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Other Parameters:

Cyanide
Total Oil & Grease (fats, oils, and grease)
Total Toxic Organics (TTO)
Biochemical Oxygen Demand (BOD₅)
Total Suspended Solids (TSS)

The sampling protocols for the parameters listed above are detailed in Attachment 1 of this permit.

The analytical results are to be received by the NBC by June 30, 2015. 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).

5. ***Routine Monitoring Requirements:*** Upon completion of the four day SBR Pretreatment System Start-Up monitoring, the Permittee shall conduct routine monitoring from the sample port on the discharge line of the final equalization tank, Sample Location #1, one day each week for arsenic and nitrogen compounds and monthly for other parameters. The weekly composite samples must be collected, preserved, and analyzed separately in accordance with EPA protocols for the following parameters:

Metals:

Arsenic (Total)*

Nitrogen Parameters:

Ammonia (Total)	Nitrate + Nitrite Total Nitrogen	Total Kjeldahl Nitrogen
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The monthly samples must be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Metals:

Cadmium (Total)	Lead (Total)	Nickel (Total)
Chromium (Total)	Mercury (Total)	Silver (Total)
Copper (Total)		Zinc (Total)

Other Parameters:

Cyanide
Total Oil & Grease (fats, oils, and grease)
Total Toxic Organics (TTO)
Biochemical Oxygen Demand (BOD₅)
Total Suspended Solids (TSS)

The sampling protocols for the parameters listed above are detailed in Attachment 1 of this permit.

*The sampling conducted for the Arsenic Study may be used to satisfy the weekly sampling requirements for Arsenic (Total).

Table 4 attached hereto summarizes the sampling requirements for this facility.

8. All discharge 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 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.
10. The Permittee must compare the analytical report results with the NBC effluent discharge limitations listed in Table 1 and Table 2. 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.
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 wastewater flows;
 - e. Discovery of additional information on monitoring or production unavailable to the NBC at the time this permit was prepared.

F. Arsenic Study Requirements:

1. The Permittee has agreed to conduct a study to evaluate the impact of arsenic discharges from Rhode Island Resource Recovery Corporation to the Field's Point Wastewater Treatment Facility and the Providence River as outlined in the plan dated June 10, 2014. The study is attached hereto and incorporated herein as Attachment 2. All requirements of the study must be completed in accordance with the timeline outlined in the study.

2. The Permittee agrees to conduct monitoring at the Rhode Island Resource Recovery Corporation facility and of influent and effluent at the Field's Point Wastewater Treatment Facility in accordance with the Arsenic Study. The monitoring at Rhode Island Resource Recovery Corporation and the Field's Point Wastewater Treatment Facility must be conducted on the same day. The Permittee must coordinate the Arsenic Study sampling with the NBC Environmental Monitoring Manager. The NBC will provide split samples of the Field's Point influent and effluent to the Permittee. Table 5 attached hereto summarizes the sampling requirements of the Arsenic Study.
3. The Permittee shall submit quarterly Arsenic Study status reports to the Narragansett Bay Commission. The reports are to be submitted by the last day of February 2015, May 2015, August 2015, November 2015, and February 2016. The status reports are to include the analytical data collected during the quarter, an evaluation of the data and the steps to be taken during the next quarter.
4. The Permittee shall submit a summary report to the Narragansett Bay Commission and the Rhode Island Department of Environmental Management after the SBR pretreatment system is fully operational. The report shall evaluate the impact of Rhode Island Resource Recovery Corporation discharges on the Field's Point Wastewater Treatment Facility as they relate to arsenic. The report shall be submitted by the last day of May 2016.

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. 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. 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;
- f. Carbon treatment unit failure;
- g. Cell liner 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. 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 hold harmless and indemnify and/or 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 hold harmless and indemnify and/or reimburse 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 individually or by interaction with other wastes.

3. Violations of the NBC's Permit

The Permittee agrees to hold harmless and indemnify and/or 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 individually 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 Narragansett Bay 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.

NPD:KMB: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

Table 1

NBC Effluent Discharge Limitations
Field's Point District

<u>Parameter</u>	<u>Limitation (Max)</u>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD ₅)	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.

<u>Parameter</u>	Daily Maximum Composite for 1 day (<u>mg/l</u>)	Average 10 day (<u>mg/l</u>)
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 may 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

NBC Interim Effluent Discharge Limitations

<u>Parameter</u>	<u>Daily Maximum Limitation</u>	<u>Monthly Average</u>
Arsenic (Total)	0.60 mg/L	0.40 mg/L
Ammonia*	5.0 mg/L	
Nitrate + Nitrite*	10.0 mg/L	
Non-Biodegradable Organic Nitrogen*	100.0 mg/L	
Maximum Daily Flow	464,000 gallons/day	
Maximum Flow Rate	30,000 gallons/hour	
Daily Average Flow Rate	22,500 gallons/hour	

*The interim effluent discharge limitations for Ammonia, Nitrate+Nitrite and Non-Biodegradable Organic Nitrogen are seasonal limitations. These interim limits are effective May 1st through October 31st of every year.

Table 3

Rhode Island Resource Recovery Corporation
Sampling Requirements for November 2014 to the Start-Up of the SBR Pretreatment System

Sample Location #3				
Interim Sample Location at Pump Station #1				
		Monthly	Weekly	
Month	Composite Sample	Parameters	Composite Sample	Parameters
November 2014	X	Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN*, O&G*, TTO, BOD, TSS	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
December 2014	X	Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN*, O&G*, TTO, BOD, TSS	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
January 2015	X	Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
February 2015	X	Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
March 2015	X	Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
April 2015	X	Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS	X	As, Ammonia, Nitrate+Nitrite, TKN, TN

Legend

Cd – Cadmium	Hg – Mercury	O&G - Total Oil & Grease (fats, oils & grease)
Cr – Chromium	Ni – Nickel	BOD - Biochemical Oxygen Demand
Cu – Copper	Ag - Silver (Total)	TSS - Total Suspended Solids
CN – Cyanide	Zn - Zinc (Total)	TTO - Total Toxic Organics
Pb – Lead		TKN - Total Kjeldahl Nitrogen
		TN - Total Nitrogen

*Cyanide and Total Oil & Grease samples are to be collected as four grab samples over the course of the day in accordance with Attachment 1.

Table 4

Rhode Island Resource Recovery Corporation
Sampling Requirements Upon Start-Up of SBR Pretreatment System

Sample Location #1				
Sample Port on the Discharge Line of the Final Equalization Tank				
Monthly			Weekly	
Month	Composite Sample	Parameters	Composite Sample	Parameters
January	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
February	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
March	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
April	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
May	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
June	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
July	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
August	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
September	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
October	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
November	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN
December	X	As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn, CN, O&G, TTO, BOD, TSS, Ammonia, Nitrate+Nitrite, TKN, TN	X	As, Ammonia, Nitrate+Nitrite, TKN, TN

Legend

Cd – Cadmium
 Cr – Chromium
 Cu – Copper
 CN – Cyanide
 Pb – Lead

Hg – Mercury
 Ni – Nickel
 Ag - Silver (Total)
 Zn - Zinc (Total)

O&G - Total Oil & Grease (fats, oils & grease)
 BOD – Biochemical Oxygen Demand
 TSS – Total Suspended Solids
 TTO – Total Toxic Organics
 TKN - Total Kjeldahl Nitrogen
 TN - Total Nitrogen

*Cyanide and Total Oil & Grease samples are to be collected as four grab samples over the course of the day in accordance with Attachment 1.

Table 5

Rhode Island Resource Recovery Corporation
Sampling Requirements for Arsenic Study

	RIRRC				Field's Point WWTF			
	Total Arsenic		Speciation		Total Arsenic		Speciation	
	Influent Frequency	Effluent Frequency	Influent Frequency	Effluent Frequency	Influent Frequency	Effluent Frequency	Influent Frequency	Effluent Frequency
November 2014		1x/week			1x/week	1x/month		1x/month
December 2014		1x/week			1x/week	1x/month		1x/month
January 2015		1x/week			1x/week	1x/month		1x/month
February 2015		1x/week			1x/week	1x/month		1x/month
March 2015		1x/week			1x/week	1x/month		1x/month
April 2015		1x/week			1x/week	1x/month		1x/month
May 2015	1x/week	2x/week		1x/month	1x/week	1x/week	1x/month	1x/month
June 2015	1x/week	2x/week			1x/week	1x/week		
July 2015	1x/week	2x/week		1x/month	1x/week	1x/week	1x/month	1x/month
August 2015	1x/week	2x/week			1x/week	1x/week		
September 2015	1x/week	2x/week		1x/month	1x/week	1x/week	1x/month	1x/month
October 2015	1x/week	2x/week			1x/week	1x/week		
November 2015	1x/week	2x/week		1x/month	1x/week	1x/week	1x/month	1x/month
December 2015	1x/week	2x/week			1x/week	1x/week		
January 2016	1x/week	2x/week		1x/month	1x/week	1x/week	1x/month	1x/month
February 2016	1x/week	2x/week			1x/week	1x/week		
March 2016	1x/week	2x/week		1x/month	1x/week	1x/week	1x/month	1x/month
April 2016	1x/week	2x/week			1x/week	1x/week		

Arsenic Study sampling at RIRRC for each month must be conducted on the same day as the sampling at the Field's Point Wastewater Treatment Facility. The monthly sampling is to be coordinated with the NBC Environmental Monitoring Manager. The NBC will provide RIRRC with split samples from the influent and effluent of the Field's Point Wastewater Treatment Facility.

Attachment 1

Monitoring Protocols

There are two types of samples that can be collected, composites and grab samples.

Composite samples are to consist of equal volume grab samples collected every half hour or collected continuously with a composite sampler.

Grab samples are samples collected at one time.

Metals samples are to be collected as composite samples. The pH of the metals sample is to be adjusted to below 2.0 standard units (s.u.) by the addition of nitric or sulfuric acid and refrigerated until analysis. The parameters for metals analysis are:

Arsenic (Total)	Copper (Total)	Nickel (Total)
Cadmium (Total)	Lead (Total)	Silver (Total)
Chromium (Total)	Mercury (Total)	Zinc (Total)

Nutrient samples are to be collected as composite samples. Nutrient samples are to be preserved immediately upon collection by adding sulfuric acid to the sample to lower the pH to below 2.0 s.u. The samples must be refrigerated until analysis which must be completed within 28 days. The parameters that must be analyzed are:

Ammonia (Total)	Nitrate + Nitrite	Total Kjeldahl Nitrogen
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Samples for Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS) are to be collected as composite samples. No preservation chemicals are needed for these parameters.

The Permittee may collect one composite sample for the aforementioned parameters. The composite sample may be poured off into three separate bottles. One bottle each for metals, nutrient, and BOD/TSS.

Cyanide: Four (4) grab samples shall be collected at equidistant time intervals over the entire operating day (i.e. one (1) sample every two (2) hours over the course of 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 the four (4) preserved grab samples must be refrigerated until analysis and must be analyzed within fourteen (14) days of collection.

Total Oil and Grease (fats, oils, and grease): Four (4) grab samples shall be collected at equidistant time periods over the entire operating day (i.e. one (1) sample every two (2) hours over the course of an eight (8) hour operating day). Each grab sample must be collected in a glass bottle, preserved, and analyzed separately in accordance with EPA protocols. The mathematical average of the four results must be reported to determine compliance with the NBC discharge limitation of 125 ppm for Total Oil and Grease.

Total Toxic Organics (TTO) shall be conducted by collecting two separate samples according to the following procedures:

- a. ***Volatile Organic Compounds Sampling*** - Four (4) grab samples are to be collected at equidistant time periods over the entire operating day (i.e. one (1) sample every two (2) hours over the course of an eight (8) hour operating day). Each grab sample is to be collected in a glass bottle with a Teflon lined cap with a volume of either 25 or 40 ml. Each grab sample must immediately be tested for residual chlorine with potassium iodide paper. If residual chlorine is present in the sample, then 0.008% by volume of sodium thiosulfate must be added (i.e. 2 mg per 25 ml of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate should be repeated. Once chlorine residual has been eliminated from the sample, the sample should be stored in the dark and refrigerated at a temperature of 0 - 4°C until analysis. No air bubbles may be present in any grab sample or that sample must be discarded. Each grab sample is to be analyzed separately and the mathematical average reported. Alternatively, the grab samples may be composited in the laboratory at a temperature of 0 - 4°C immediately before analysis. All samples must be analyzed within three (3) days of collection for the Volatile Organic Compounds (purgeables) fraction of the Total Toxic Organics (TTO) list enclosed.
- b. ***Acid, Base, and Neural Fraction Sampling*** - Collect a composite sample, which is to consist of equal volume grab samples collected at least every half hour over the operating day or collected continuously with a composite sampler. A minimum of 1,000 ml (1L) of wastewater is to be collected in an amber glass bottle with a Teflon lined cap and submitted for analysis. Each grab sample must be preserved immediately upon sample collection according to EPA protocols prior to compositing with other preserved grab samples. If an automatic composite sampler is used, it must be as free as possible of plastic tubing and other potential sources of contamination; if the sampler includes a peristaltic pump, use a minimum length of properly cleaned

silicone rubber tubing. The sampler must utilize glass sampling containers. The samples must be refrigerated to a temperature of 0-4°C during sample collection and must be immediately preserved once the sample collection process is completed. The samples must be tested for residual chlorine with potassium iodide paper. If chlorine residual is present in the sample, then 0.008% by volume of sodium thiosulfate must be added (i.e. 80mg per liter 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 must be stored in the dark until analysis. All samples 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.

Attachment 2

Proposed Work Plan Evaluation of Impacts on NBC Field's Point WWTF Effluent and Evaluation of Pretreatment Alternatives Arsenic in Wastewater Generated at Central Landfill

Introduction

Starting in November 2014, the Rhode Island Resource Recovery Corporation (RIRRC) will begin discharging its wastewater to the Narragansett Bay Commission's (NBC) collection system for treatment at the Field's Point wastewater treatment facility (WWTF). RIRRC's wastewater will initially be discharged untreated until it completes construction and start-up of its new Pretreatment Plant. During the interim period, RIRRC will discharge a maximum of 325,000 gallons per day (gpd) of wastewater to the NBC and control flow using two new storage tanks with a total capacity of 1.5 million gallons.

RIRRC's Pretreatment Plant is scheduled to be operational in May 2015 and is designed to remove nitrogen-containing compounds to acceptable concentrations and loadings for discharge to the Field's Point WWTF. It is designed for a maximum flow of 650,000 gpd at the concentrations of nitrogen compounds anticipated over the next 20 years of RIRRC's landfilling operations. The higher design flow anticipates increased wastewater flows from RIRRC as new landfill cells are constructed as approved by the Rhode Island Department of Environmental Management (RIDEM).

RIRRC has prepared this draft Work Plan at the request of NBC and RIDEM to establish a process: (1) to evaluate the potential for RIRRC's wastewater to cause NBC's effluent to exceed the water quality standards for arsenic as flow increases over time; and (2) to evaluate whether arsenic removal is necessary and, if it is necessary, to evaluate the efficacy of pre-treatment alternatives to address arsenic.

Approach

As an initial step in developing this Work Plan, CDM Smith Inc. (CDM Smith) reviewed the extensive available historic data on arsenic concentrations both at the Field's Point WWTF and in RIRRC's wastewater. Table 1, below, shows the recent concentrations of arsenic in RIRRC's wastewater. Monthly average flow rates are provided as well. Previously, some preliminary calculations performed by RIDEM, NBC and RIRRC, considered the potential for RIRRC's wastewater to cause an exceedance of the established water quality standard for arsenic in the receiving water for the Field's Point WWTF when at maximum flow levels.

CDM Smith's calculations, based on this extensive historic data, show that the concentration of arsenic in the Field's Point WWTF receiving water will be in compliance with the arsenic water quality standard for at least several years after addition of RIRRC's wastewater. This multi-year window provides an opportunity to assess arsenic within the Pretreatment Plant and the Field's Point WWTF system. If removal of arsenic from RIRRC's wastewater is required at a future date, RIRRC will have both specific information [based on actual data from measurements of the impact of both the Pretreatment Plant and the Field's Point WWTF on the RIRRC effluent] and adequate time to design and implement a supplemental treatment system at the Pretreatment Plant based on the new effluent, if necessary.

Table 1
Summary of Recent Historic Flow and Arsenic Data in RIRRC Wastewater since January 2013

Year	Month	Average Flow Rate (gallons/day)	Average Arsenic Concentration (mg/L)	Loading (Pounds per day) (Note 2)
2013	January	265,279	0.28	0.62
	February	300,942	0.24	0.60
	March	257,027	0.28	0.60
	April	237,313	0.29	0.57
	May	206,107	0.33	0.57
	June	275,368	0.31	0.71
	July	231,317	0.21	0.41
	August	218,524	0.38	0.69
	September	207,124	0.40	0.69
	October	173,261	0.46	0.66
	November	160,108	0.48	0.64
	December	212,188	0.36	0.64
2014	January	264,445	0.27	0.60
	February	264,989	0.28	0.62
	March	256,477	0.3	0.64
	April	304,239	0.25	0.63
Average Monthly		239,669	0.32	0.62

Notes

1. Monthly flows and arsenic concentrations as shown on averages from daily total readings (flow) and from weekly samples collected during the month (arsenic concentration).
2. Loading calculated from monthly average flows and concentrations.

The Work Plan to evaluate the arsenic discharges, as summarized below, will consist of two steps.

First, starting in the summer of 2014, RIRRC will conduct a focused sampling and analysis program to assess the concentrations of arsenic both from RIRRC and at the Field's Point WWTF. This program is intended to confirm the assumptions used to estimate effluent concentrations and the form of arsenic (e.g., organic or inorganic) in the Field's Point effluent. This information will then be used to evaluate whether RIRRC's wastewater will potentially cause water quality standard violations related to arsenic.

Second, if additional treatment is determined to be required, RIRRC will evaluate alternative treatment approaches to reduce arsenic loadings from the Pretreatment Plant. RIRRC will initiate this work six months after the Pretreatment Plant is operational and treating the nitrogen compounds to the permit standard. The work will initially include bench scale evaluations of treatment alternatives in an effort to determine the best treatment technology, followed by a pilot scale evaluation, and then the development of a conceptual and final design for a supplemental treatment system.

The details of the Work Plan items are provided below.

Figure 1 is provided with the Work Plan to provide a schematic of the combined system at RIRRC as its wastewater is collected from the landfill-related sources, the location of the on-site equalization tanks and Pretreatment Plant currently under construction, and the Field's Point WWTF.

As RIRRC works with NBC to implement this Work Plan, there will be a series of alternative outcomes that may be implemented based on the results of the proposed tasks. CDM Smith has prepared Figure 2 which outlines an overall decision-tree and schedule for the proposed tasks to outline outcomes from each of the two tasks.

Estimated Arsenic Concentrations in Field's Point WWTF Effluent Discharge

CDM Smith has prepared the following calculation of the anticipated concentrations of arsenic in the Field's Point WWTF effluent and overall water quality standard in the receiving water after it begins to receive effluent from RIRRC.

Peak flows will be attenuated by the use of the on-site storage tanks. Based on detailed flow analysis performed by RIRRC and CDM Smith, the three future flow scenarios for RIRRC's wastewater are summarized in Table 2.

Table 2
Summary of Flow Scenarios of RIRRC Wastewater

Scenario	Average Daily Flow (gpd)	Peak Daily Flow (gpd)	Basis
Current Flow Conditions Including operation of Pretreatment Plant starting in May 2015 (Nov 2014 through May 2016)	240,000	325,000	Review of historic data for last two years incorporating use of new storage tanks to attenuate peaks
Initial Pretreatment Plant Operations and Initial Area of Phase VI Liner On-Line (May 2016 through Summer 2019)	320,000	450,000	Historic data review plus anticipated increases for initial Phase VI cell incorporating use of storage tanks
Long-Term Conditions (2019 to completion of Phase VI)	390,000	650,000	Long-term design flows for Pretreatment Plant

Note: Current flows rounded to nearest thousand.

Figure 1
Schematic Component Flowchart – RIRRC Wastewater and NBC System

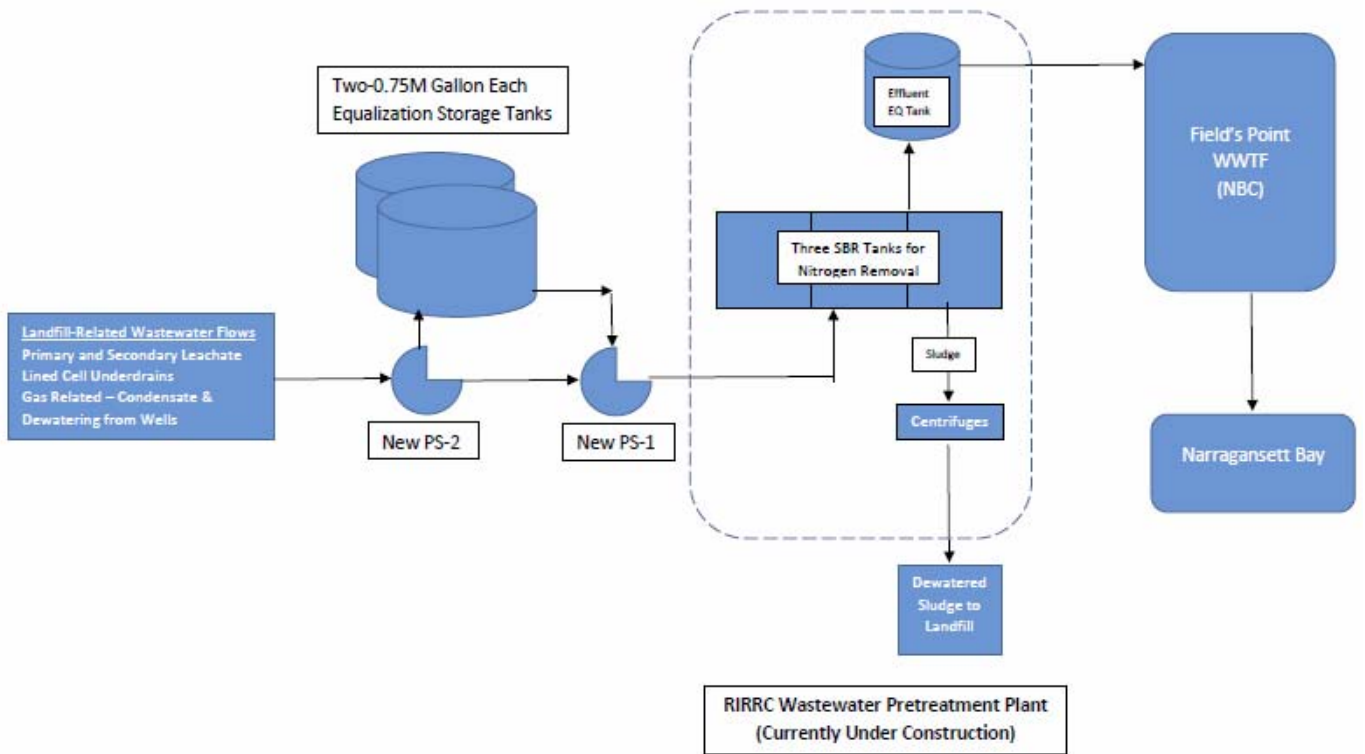
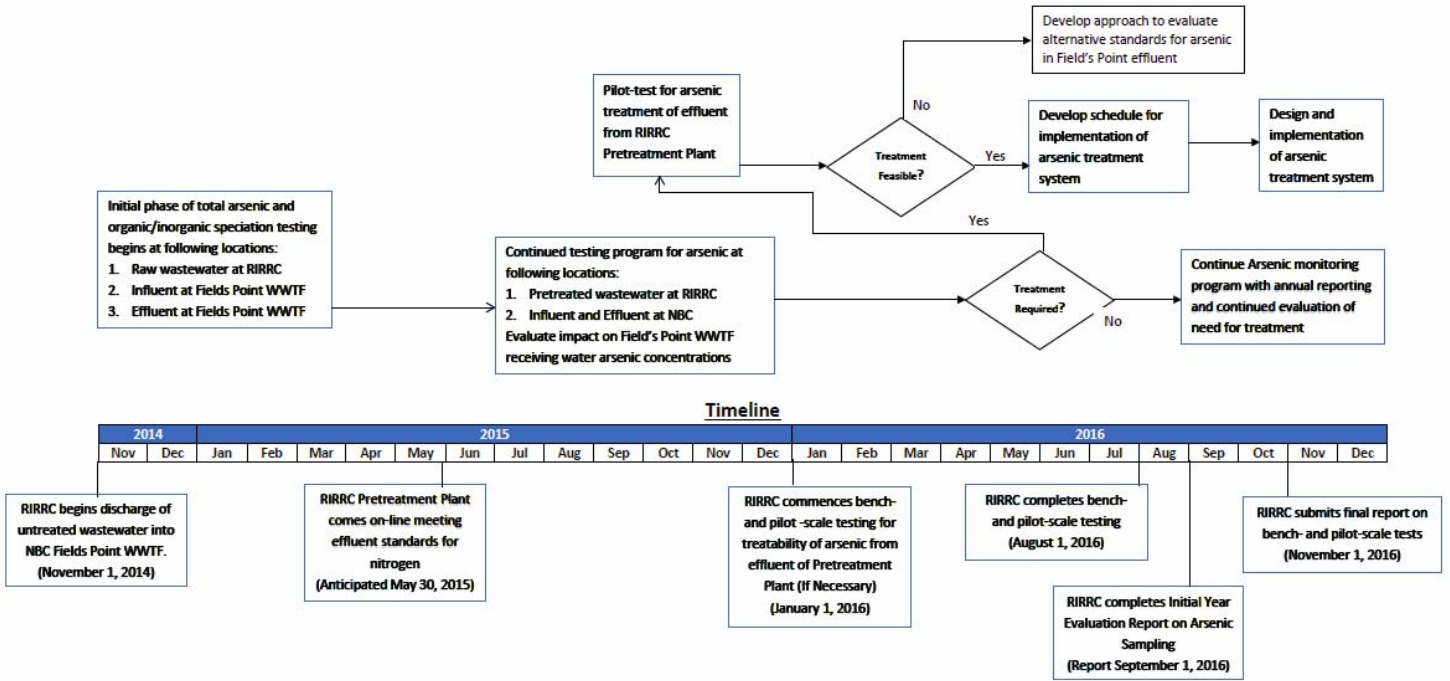


Figure 2
Decision Flowchart – Arsenic in RIRRC Wastewater and Impacts on NBC Fields Point WPCF Effluent



Currently, the NBC samples for total arsenic in its influent and effluent at Field's Point WWTF at a frequency of one sample per week (influent) and one sample per month (effluent). Based on the NBC's published monitoring reports¹, the highest arsenic concentration in the discharge in the last two years is 1.49 µg/L, with typical levels being approximately 1.1 µg/L. The average flow at Field's Point WWTF in 2012 and 2013 is 40.06 and 42.7 million gallons per day (MGD), respectively. Using the 2013 average flow and the peak concentration of arsenic detected over the past two years, the estimated current amount of arsenic being discharged by the Field's Point WWTF is calculated as follows:

$$\text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34 \text{ conversion factor} = \text{pounds arsenic per day discharged}$$

$$(42.7 \text{ MGD}) \times (.00149 \text{ mg/L}) \times 8.34 = \underline{0.53 \text{ pounds arsenic per day discharged by Field's Point WWTF}}$$

Using the assumptions outlined in Table 3, below, CDM Smith estimated that the future allowable concentration of arsenic in the effluent from the NBC Field's Point WWTF is 3.54 µg/L. This estimate correlates to the separate prior calculations performed by NBC and RIDEM.²

Table 3

Summary of Assumptions Used to Develop Allowable Field's Point Effluent Concentrations for Arsenic

Calculation Criteria	Value	Basis
Background Concentration in Receiving Water	1.14 µg/L	RIDEM Letter dated June 10, 2011
Dilution Factor	20	
Allocation Factor	90%	
Water Quality Criteria	1.4 µg/L	Human Health criteria for Aquatic Organisms Only listed in Table 1, RIDEM's Ambient Water Quality Criteria and Guidelines Water Quality Regulations July 2006, Amended April 2013.
Removal of Arsenic in Field's Point WWTF or RIRRC Pretreatment Plant	10%	Conservative assumption based on current NBC data and results of RIRRC pilot tests

The estimated concentrations of the effluent from the Field's Point WWTF for the varying flow scenarios of RIRRC's wastewater is shown on Table 4 below. For the current flow condition, the arsenic loading from RIRRC was calculated based on the monthly average loading of arsenic since January 2013.

¹ Pretreatment Program Annual Reports Field's Point and Bucklin Point Districts, January 1, 2012 - December 31, 2012 and January 1, 2013 - December 31, 2013 (NBC, March 2013 and 2014, respectively).

² RIDEM Letter to Raymond Marshall, NBC Executive Director dated June 10, 2011 and NBC Memorandum to Thomas P. Uva, NBC Director for Planning, Policy & Regulation from James Kelly, Assistant Environmental Monitoring Manager dated March 14, 2013.

Estimated future loadings of arsenic from RIRRC are calculated using the average daily flow shown on Table 2 and a proportion of the current monthly average loading.

This conservative analysis indicates that the NBC will be in compliance with the effluent standard for arsenic during the initial two flow stages (see Table 2) that RIRRC will operate at over the next several years. Even if the maximum current loading is utilized for the existing average flows from RIRRC, NBC will remain within the allowable effluent limit.

Table 4
Summary of Estimated Final Concentration of Arsenic in Field's Point WWTF Receiving Water

Scenario	Average Daily Flow (gpd)	Loading of Arsenic from RIRRC (pound/day)	Calculated Final Concentration of Arsenic in NBC Field's Point Effluent (µg/L)	Field's Point WWTF Effluent in Compliance for Arsenic?
Current Flow Conditions Including operation of Pretreatment Plant starting in May 2015 (Nov 2014 through May 2016)	240,000	0.62	3.0	Yes
Initial Pretreatment Plant Operations and Initial Area of Phase VI Liner On-Line (May 2016 through Summer 2019)	320,000	$0.62 \times (320,000/240,000) = 0.83$	3.5	Yes
Long-Term Conditions (2019 to completion of Phase VI)	390,000	$0.62 \times (390,000/240,000) = 1.01$	4.0	Potentially No

Based on these estimates, CDM Smith believes that the effluent from the NBC's Field's Point WWTF will be in compliance with the RIDEM established regulatory standard for arsenic when the initial lined cells from Phase VI become operational.

Detailed Work Plan

The following details the work proposed by RIRRC to assess the potential for arsenic in RIRRC's wastewater to cause an exceedance in NBC's effluent as RIRRC's wastewater flows increase to the maximum discharge level.

Task 1: Future Wastewater Monitoring Program

RIRRC's current wastewater discharge permit with the City of Cranston requires extensive sampling of the RIRRC's wastewater. Over the past several years, RIRRC has performed significant sampling of the

individual sources that comprise the total wastewater flow as well as specific speciation testing of the combined influent arsenic to determine if the arsenic is in an inorganic form or bound with organic molecules. Separately, NBC has been conducting sampling of its influent and effluent for total arsenic on a weekly and monthly frequency, respectively. This effort provides a significant database on the current arsenic concentrations seen at the Field's Point WWTF. The information collected to date by both RIRRC and NBC has been used to develop the estimates of future arsenic discharges provided above.

CDM Smith proposes to augment the current program for arsenic testing of wastewater streams at both RIRRC and Field's Point as RIRRC connects to the NBC system, to fulfill the following objectives:

1. Confirm the assumptions made in the calculations presented above regarding the incremental impact of RIRRC's wastewater on meeting the regulatory water quality standard for arsenic in the Field's Point WWTF receiving water. Estimate an approximate timeline when increased flows from RIRRC caused by additional lined landfill cells coming on-line may create a water quality standard violation at the NBC discharge;
2. Develop an understanding of the changes in the type of arsenic (e.g., organic or inorganic) that occur as RIRRC's wastewater is treated at both Field's Point WWTF and the Pretreatment Plant;
3. Utilize the additional sampling to determine a removal efficiency for each treatment plant, since information from the pilot-testing performed at RIRRC, for the new pre-treatment plant, and a review of the data collected by NBC indicates that the treatment plant(s) will remove some amount of arsenic from the influent streams.
4. Determine acceptable arsenic loading conditions from RIRRC to keep NBC effluent in compliance by using the arsenic information gathered during the augmented monitoring program.
5. Augment the currently available information to evaluate potential treatment technologies that could be evaluated as part of a bench- and/or pilot-scale program.

The sampling program at both the Field's Point WWTF and RIRRC's Pretreatment Plant as proposed by CDM Smith is summarized in Table 5.

As the data is being collected and presented, RIRRC will provide NBC with a status report on a quarterly (e.g., every three months) frequency. These status reports will provide the data collected to date as well as a preliminary evaluation of the available information. One year after the Pretreatment Plant is fully operational, RIRRC will provide NBC and RIDEM with a summary report that will evaluate the data collected to date and provide an updated assessment of the impact of the addition of RIRRC's wastewater on the effluent concentrations from the Field's Point WWTF and make recommendations as to the future monitoring program.

**Table 5
Summary of Proposed Sampling Program**

Scenario	Sampling at RIRRC				Sampling at NBC			
	Sample Location	Sample Type	Frequency	Reason	Sample Location	Sample Type	Frequency	Reason
Pre-RIRRC Discharge to NBC Field's Point WWTF (July 2014 through October 2014)	Influent	N/A	N/A	N/A	Influent	Total As	1x/week	Current Frequency
	Effluent	Total As	1x/week	Current Cranston IPP Requirements	Effluent	Total As	1x/month	Current Permit Requirement
						Speciation	Two samples during period	Evaluate any changes in speciation from treatment at Field's Point
Before RIRRC Pretreatment Plant Operational (Nov 2014 through May 2015)	Influent			Same as Effluent	Influent	Total As	1x/week	Current Frequency
	Effluent	Total As	1x/week	Monitor As concentrations leaving RIRRC	Effluent	Total As	1x/month	Current Frequency
						Speciation	1x/month	Evaluate any changes in speciation from treatment at Field's Point
Initial Operations of RIRRC Pretreatment Plant (May 2015 through May 2016) See Note 2	Influent	Total As	1x/week	Monitor removal efficiency of Pretreatment Plant	Influent	Total As	1x/week	Current Permit Requirement
		Speciation	None	Not relevant		Speciation	Every 2 months	Assess influent arsenic types
	Effluent	Total As	2x/week	Develop database of concentrations in treated effluent	Effluent	Total As	1x/week	Evaluate compliance with water quality standard. Determine any removal in Field's Point WWTF
		Speciation	Bi-monthly	Confirm preliminary findings in full-scale		Speciation	Every 2 months	Assess arsenic type discharging from Field's Point WWTF
Long-Term	Sampling program to be established by NBC in IPP				Influent	Total As	1x/week	Current Frequency
					Effluent	Total As	1x/month	Current Frequency

Notes

1. Total arsenic testing shall be by EPA Method 200.7. Speciation testing shall be by Method IC-ICP-DRC-MS.
2. Sampling frequency at RIRRC Pretreatment Plant may be reduced based on review of results as program proceeds.
3. Speciation sampling at NBC may be reduced based on review of results as program proceeds.

Task 2: Bench- and Pilot-Scale Treatment Evaluation of Pretreated RIRRC Wastewater
If it is determined based on Task 1 that further potential for arsenic removal at RIRRC is required, RIRRC will initiate the second task of this Work Plan as outlined below. If required, Task 2 is anticipated to start approximately six months after the Pretreatment Plant is fully operational and meeting its discharge standards for nitrogen, and the evaluation of the arsenic data to date has been completed (Task 1), RIRRC proposes to commence with a bench- and pilot-scale testing program to determine methods for the reduction of arsenic from the pretreated wastewater prior to its discharge into the NBC system.

The following is a brief description of CDM Smith's outline of the proposed bench- and pilot-scale programs:

First, CDM Smith will evaluate the implementation of the arsenic removal in the existing SBR tanks. This evaluation will incorporate an analysis of the impact of arsenic treatment in the SBR tanks on cycle-times and treatment efficiency for nitrogen.

Second, if use of the SBR tanks is not successful or feasible, CDM Smith will conduct a series of evaluations of additional processes after the SBR's, which may include arsenic-specific adsorption media, additional separation tanks for chemical precipitation and coagulation, and select proprietary technologies.

The following preliminary work plan for Task 2 has been provided as an example of the approach that CDM Smith proposes, if needed. Based on the sampling performed in Task 1 and initial evaluations of the arsenic concentrations and form in RIRRC's treated effluent, RIRRC will prepare a detailed Work Plan for the bench- and pilot-testing that will evaluate potential doses of iron or aluminum salt coagulants required to produce a floc and the impacts of the high chemical oxygen demand (COD) of RIRRC's wastewater; the impact of the use of these coagulants on the pH of the wastewater and floc separation; and the amount of sludge generated per pound of arsenic removed.

Work Plan to Evaluate Arsenic Removal Integrated with Activated Sludge Treatment in the SBRs

Partial arsenic removal may be achieved by adding low to moderate doses of iron salts directly to the SBR activated sludge. If successful, this concept would avoid the need for a separate physical chemical treatment system. Instead, co-precipitated arsenic would be removed from the SBR with the waste activated sludge. Iron may provide a collateral benefit of improved activated sludge settling.

To evaluate this approach at bench scale, samples of the full scale activated sludge would be treated with several concentrations of ferric sulfate, supplemented with alkali as needed to compensate for the acidity and maintain a pH of approximately 7.5. Target iron doses for the initial tests would be between 20 to 80 mg/L. This concentration range is less than the prior bench scale tests, considering that:

- Not all of the arsenic has to be removed to reach the target effluent concentration
- Co-settling with the activated sludge solids will likely enhance colloid removal.

For the bench scale tests, the iron would be added and the pH adjusted, followed by aeration of the activated sludge to maintain an aerobic oxidation-reduction potential for approximately 30 minutes.

Then the sample would be allowed to settle for 30 minutes prior to collecting a supernate sample for analysis. This model could be readily adaptable to the full scale SBR sequence and an analysis of the overall impact of cycle times will be completed.

Anionic polymer (at a few mg/L) may be needed to enhance settling, as was the case in the bench scale tests.

Samples will primarily be analyzed for total and soluble arsenic, and total and soluble phosphorous.

Raw RIRRC wastewater	(control)
SBR treated wastewater supernate	(control- no iron)
SBR activated sludge (fully mixed)	(control- no iron)
SBR activated sludge supernate	20 mg/L Fe
SBR activated sludge supernate	40 mg/L Fe
SBR activated sludge supernate	60 mg/L Fe
SBR activated sludge supernate	80 mg/L Fe

Soluble arsenic samples will require filtration prior to preservation. RIRRC's wastewater samples with activated sludge solids are difficult to filter. Filtration can be achieved with a sandwich of a 10 micron nominal glass fiber pre-filter on top of a 0.45 micron membrane filter.

Evaluation of test results

If arsenic removal is sufficient to meet the target effluent concentration, the next step would be to begin adding the appropriate dose to the full scale system, along with the compensating alkali dose required to maintain the target pH. Iron also precipitates phosphorous. If the bench scale test analyses show a significant loss of soluble phosphorous in the activated sludge, it may be necessary to increase the phosphorous supplement feed rate in conjunction with iron addition.

If the bench scale tests show that arsenic removal is insufficient to meet the target effluent concentration

- Much of the remaining arsenic is soluble, the iron dose was probably inadequate to achieve co-precipitation; and
- Low soluble arsenic is coincident with high total arsenic, 30 minutes of settling was not adequate to provide the liquid-solids separation necessary. This would indicate that more coagulant and/or polymer, and/or filtration may be necessary. Based on the results, CDM Smith may run bench-scale isotherm tests on the wastewater.

Evaluation of Full Scale Implementation

Initial full scale tests should feed the iron salt and compensating alkali from 300 gallon totes. The iron dose would be increased to the target concentration in four steps (e.g., 25%, 50%, 75%, and 100%) at two week intervals while monitoring the impact on the activated sludge soluble phosphorous concentration, and the removal of COD, nitrogen and arsenic.

If the full scale tests are successful, the system could be upgraded with bulk-storage tanks for the chemicals.

Schedule

If necessary, the work for Task 2 outlined above will be completed according to the schedule shown on Figure 2. The schedule for any bench- and pilot-testing will commence in January 2016, after the Pretreatment Plant is anticipated to be fully operational for a period of six months, with a final report in November 2016.

CERTIFICATE TO DISCHARGE

the following types of process water:

LANDFILL LEACHATE DISCHARGES

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

Rhode Island Resource Recovery Corporation

65 Shun Pike

Johnston, RI 02919

PERMIT NUMBER: P3412-004-1019

PERMIT EXPIRATION DATE: 10/31/2019

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.

November 7, 2014
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: P4100-100-1220
Company Name: **UNIVERSAL SHAPED WIRE, INC.**
Facility Address: 1 Horton Street, Providence, RI 02904
Mailing Address: 1 Horton Street, Providence, RI 02904
Facility President: Mr. Edwin Sutcliffe
Facility Authorized Agent: Mr. Edwin Sutcliffe
User Classification: Zero Discharge Copper Former
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. Edwin Sutcliffe and Universal Shaped Wire, 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 January 1, 2016
and expires on December 31, 2020.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC's Rules and Regulations and may subject the user to an **Administrative or Civil Penalty** of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

For the **Narragansett Bay Commission:**

/s/ Kerry M. Britt
Kerry M. Britt, Pretreatment Manager
Narragansett Bay Commission

December 15, 2015
Date

Mr. Edwin Sutcliffe and Universal Shaped Wire, Inc. hereby consents to this Zero Process Wastewater-Sanitary Discharge Permit. In so consenting, appropriate officers of **Universal Shaped Wire, Inc.** have personally read and understood each of the numbered provisions in this Zero Discharge Permit. This permit allows **Universal Shaped Wire, 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 submitted to the NBC on December 16, 2005. This pretreatment system shall be used specifically for the use of recycling wastewater or eliminating discharges from the following operations:
 - a. Wire Drawing;
 - b. Wire Cooling from Furnace.
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 submitted to the NBC on December 16, 2005 may be treated on-site in the pretreatment equipment.
3. If any problems with the recycle 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 recycle 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. Wire Drawing Solutions;
 - b. Cooling Wastewaters;

- c. Rinse Solutions;
 - d. Soap Cleaning Solutions;
 - e. Cyanide Solutions;
 - f. Acid/Alkaline Solutions;
 - g. Vibratory/Tubbing Wastewaters;
 - h. Metal Cleaning Solutions;
 - i. Degreasing Solutions;
 - j. Solvents;
 - k. Sludges.
2. The permittee is strictly prohibited from discharging any process wastewater or sanitary wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 13, attached hereto and incorporated herein.
 3. The permittee shall not use portable pumps and flexible hoses within the facility for transfer of solutions without written authorization from the NBC.

C. Record Keeping Requirements:

1. The permittee shall be responsible for maintaining a logbook documenting all records pertaining to the operation of the pretreatment system including, but not limited to, the following:
 - a. Completed manifest forms for hazardous materials;
 - b. 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. Universal Shaped Wire, Inc. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Universal Shaped Wire, 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 Universal Shaped Wire, 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 Universal Shaped Wire, 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 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:NJD: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

<u>Parameter</u>	<u>Limitation (Max)</u>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD ₅)	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.

<u>Parameter</u>	Daily Maximum Composite for 1 day (mg/l)	Average 10 day (mg/l)
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: B8000-135-0321
Company Name: **MID STATE SEWERAGE, INC.**
Company President: Mr. Peter Stratford
Facility Address: 237 Riverlin Street, Millbury, MA 01527
Mailing Address: 237 Riverlin Street, Millbury, MA 01527
DEM License Number: RI-929

In accordance with Title 46, Chapter 25 (Act) of Rhode Island General Laws and in accordance with the Rules and Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), the Narragansett Bay Commission (NBC) hereby authorizes **Mr. Peter Stratford and Mid State Sewerage, 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 upon receipt
and expires on March 31, 2021.**

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

May 3, 2016
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 B8000-135-0321
Attachment A
Mid State Sewerage, Inc.

PERMITTED VEHICLES:

VEHICLE TYPE	REGISTRATION NUMBER	TRUCK VIN NUMBER	CAPACITY (GALLONS)
MACK TANK TRUCK	MA55342	1M3AD40K41M001039	4,724

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: B8501-154-0921
Company Name: **BRAVA RESTAURANT & BAR, INC.**
Facility Address: 908 Main Street, Pawtucket, RI 02860
Mailing Address: 117 Dawson Street, Pawtucket, RI 02861
Facility President: Mr. Gustavo Rodrigues
Facility Authorized Agent: Mr. Manuel P. Lomba
User Classification: Restaurant/Food Preparation Operations
Categorical Standards Applicable: None

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Mr. Gustavo Rodrigues and Brava Restaurant & Bar, Inc.**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 13 pages with conditions A - T.

**This permit becomes effective on October 1, 2016
and expires on September 30, 2021.**

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 30, 2016
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 April 5, 2006. 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, 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. Operational changes that may affect the quality or quantity of the process wastestream include, but are not limited to, the following:

- a. Restaurant expansion;
- b. Removal of equipment or installation of additional equipment;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- c. Change in restaurant menu;
- d. Change from the hours of facility operation specified in the discharge permit application;
- e. Changes in food preparation methods.

3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. Grease removal unit heating element failure;
- b. Grease removal unit timing unit failure;
- c. Grease removal unit wiper blade failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

H. Right of Entry:

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

I. Permit Fee:

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

J. Authorization To Do Business:

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Brava Restaurant & Bar, Inc. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Brava Restaurant & Bar, 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 Brava Restaurant & Bar, 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 Brava Restaurant & Bar, 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.

KCG:NJD:sm

Attachments:

Designation of Authorized Agent Form
RCRA Handbook
Automatic Grease Removal Unit Logsheet

Table 1

NBC Effluent Discharge Limitations
Bucklin Point District

<u>Parameter</u>	<u>Limitation (Max)</u>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD ₅)	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.

<u>Parameter</u>	Daily Maximum Concentration Limit (<u>mg/l</u>)	Monthly Average Concentration (<u>mg/l</u>)
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.

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:

Brava Restaurant & Bar, Inc.

908 Main Street

Pawtucket, RI 02860

PERMIT NUMBER: B8501-154-0921

PERMIT EXPIRATION DATE: 09/30/2021

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 30, 2016
Initial Date of Issuance

/s/ Kerry M. Britt
Kerry M. Britt, Pretreatment Manager

***TYPICAL DENTAL FACILITY
WASTEWATER
DISCHARGE PERMIT***



WASTEWATER DISCHARGE PERMIT

Permit Number: P9400-378-0421

Company Name: **DAVID I. KONICOV, D.D.S., LTD.**

Facility Address: 189 Governor Street, Providence, RI 02906

Mailing Address: 189 Governor Street, Providence, RI 02906

Facility President: Dr. David I. Konicov

Facility Authorized Agent: Dr. David I. Konicov

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. David I. Konicov and David I. Konicov, D.D.S., Ltd.**, 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 becomes effective on May 1, 2016
and expires on April 30, 2021.**

Noncompliance with any term or condition of this permit shall constitute a violation of the NBC 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 15, 2016
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 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 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 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 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 Best Management Practices on the management of Waste Dental Amalgam.

4. In accordance with Option 1 of the NBC 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 April 11, 2006. 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 maintain chair side traps on all dental chairs to capture large amalgam particles from cuspidors and vacuum systems. Chair side traps must be inspected daily and cleaned or replaced as necessary. Disposable traps or material from reusable traps must be placed in a labeled storage container. The permittee may only rinse a trap if necessary and only in a designated sink that is plumbed with appropriate flow restriction to an NBC approved amalgam separator.
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 one sink for equipment washing. This sink must be plumbed to the amalgam separator through a sample location. Signs stating "Equipment Washing Only" must be posted at this sink. Flow restrictors must be installed on the discharge pipes of this sink to prevent overwhelming the amalgam separator.
10. The permittee has designated four sink 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 April to March. 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 is required at this time. 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 x-ray processor system including, but not limited to, the following:
 - a. Amount of chemicals used (i.e., fixer, developer, etc.);
 - b. Completed manifest forms for hazardous materials.
2. 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.
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. 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 Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

Amalgam Separator Failure

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

I. Right of Entry:

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

J. Permit Fee:

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

K. Authorization To Do Business:

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. David I. Konicov, D.D.S., Ltd. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event David I. Konicov, D.D.S., Ltd. 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 David I. Konicov, D.D.S., Ltd. 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 David I. Konicov, D.D.S., Ltd. 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 Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC 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 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 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 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 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 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.

NPD:AB:smb

Attachments:

Designation of Authorized Agent Form
RCRA Handbook

Table 1

NBC Effluent Discharge Limitations
Field's Point District

<u>Parameter</u>	<u>Limitation (Max)</u>
Total Toxic Organics (TTO)	2.13
Biochemical Oxygen Demand (BOD ₅)	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.

<u>Parameter</u>	Daily Maximum (Composite for 1 day) (<u>mg/l</u>)	Average (10 day) (<u>mg/l</u>)
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.

VOLATILES EPA METHOD 624	BASE/NEUTRAL - EPA METHOD 625	PESTICIDES - EPA METHOD 625
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	
		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)

Attachment A

Best Management Practice Certification

For the 12-month period from _____, 20__ to _____, 20__

Company Name: _____

Address: _____

RETURN TO:
Narragansett Bay Commission
Pretreatment Program
2 Ernest Street
Providence, RI 02905-5502

I, _____, as authorized representative of
_____, do hereby decree that the Narragansett Bay
Commission Best Management Practices for the Management of Waste Dental Amalgam have
been fully complied with for the past twelve month period.

I certify under penalty of law that this document and all attachments were properly prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for known violations.

Authorized Representative Signature

Date

CERTIFICATE TO DISCHARGE

the following types of process water:

DENTAL OPERATIONS WASTEWATER

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

David I. Konicov, D.D.S., Ltd.

189 Governor Street

Providence, RI 02906

PERMIT NUMBER: P9400-378-0421

PERMIT EXPIRATION DATE: 04/30/2021

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 15, 2016

Initial Date of Issuance

/s/ Kerry M. Britt

Kerry M. Britt, Pretreatment Manager

ATTACHMENT VOLUME I

SECTION 3

***VARIOUS PRETREATMENT
PROGRAM DOCUMENTS***

***NBC 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:

Source of Discharge	Method of Discharge
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:

Source of Discharge	Method of Discharge
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.

3. List emergency response equipment available and procedures to be utilized in the event of a spill.

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.)

2. Are the fuel tanks above ground_____ or below ground_____? Provide the capacity of each tank in gallons:

3. Indicate provisions (i.e., alarms, sight glasses, etc.) and filling procedures that will minimize the risk of overfilling a tank.

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?

6. What measures and spill containment equipment are in place to contain spillage from an overfilled tank?

7. Are boiler treatment or other chemicals stored in the boiler facility or fuel depot areas? ___ Yes ___ No

If yes describe chemicals:

8. Detail spill containment provided for chemicals stored in this area.

9. If a spill should occur in the fuel depot or boiler facility, how would it be cleaned up and disposed?

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?

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:

Area	Solution	Pretreatment Collection Vessel
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.)

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?

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.

SIGNATURE AND TITLE OF AUTHORIZED COMPANY REPRESENTATIVE

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.

***NBC TOXIC ORGANIC/SOLVENT
MANAGEMENT PLAN GUIDANCE
DOCUMENT***



**NARRAGANSETT BAY COMMISSION
TOXIC ORGANIC/SOLVENT
MANAGEMENT PLAN**

COMPANY NAME: _____

MAILING ADDRESS: _____

PHONE NUMBER: _____

PLAN PREPARED BY: _____

In accordance with Section 7.2 of the Narragansett Bay Commission's (NBC) Rules and Regulations for the Use of Wastewater Facilities, the NBC may require any user who discharges into the facilities to provide information relating to discharges into the facilities to ensure compliance with prescribed pretreatment methods and regulations. Federal pretreatment standards, including those for metal finishers and electroplaters (40 CFR 413.03 and 433.12), require many industrial users to periodically monitor their wastestream for Total Toxic Organics (TTO's). Federal law allows the Industrial User to develop, implement and maintain a Toxic Organic/Solvent

Management Plan, which once approved by the NBC, allows the Industrial User a waiver from performing the expensive and routine TTO monitoring.

In order to provide for the control of solvents and toxic organics which are not permitted to be discharged to the NBC sewerage facilities, the NBC is requiring, as a condition of the industrial sewer user's Wastewater Discharge Permit, that a Toxic Organic/Solvent Management Plan be prepared and submitted to the NBC in lieu of the regular monitoring for toxic organic compounds and solvents.

This form has been developed as a guidance document by the NBC Pretreatment Section to assist sewer users who must prepare a Toxic Organic/Solvent Management Plan. When completed, submitted and approved by the NBC this document will constitute the facility's Toxic Organic/Solvent Management Plan. The user will then be responsible to maintain all items indicated in this plan to ensure that solvents and toxic organic compounds are not discharged into the NBC sewerage system.

Section A – Estimated Annual Solvent Purchases and Usages:

Does your firm use any solvents, chemicals or compounds containing any of the toxic organic compounds listed on the EPA table of toxic organics attached to this document, or any other solvents, such as xylene, acetone, etc., not listed on the attached table? _____

If yes, you must complete all sections of this Toxic Organic/Solvent Management Plan. If no, you must sign the certification Section F of this plan.

List the type and estimated amount of solvents or toxic organic chemicals purchased and used yearly at this facility and provide a brief description detailing the usage of the chemical. A list of EPA toxic organic compounds is attached for your information. In addition to the compounds on this list, any other solvents purchased or used on the premises must be included (i.e. Acetone, 100 gallons/yr., used for paint removal).

Solvent	Use of Solvent	Estimated Gallons Annually Purchased

Section B – Estimate of Solvents Stored and Annually Disposed:

You must account for the total gallons of each solvent or toxic organic chemical listed in Section A. Indicate the estimated volume of each chemical presently stored on site and the estimated volume disposed of annually by

each method of disposal (e.g. reclamation, contract hauler, consumption in product, evaporation, sewer discharge or other) and the total estimated gallons on site and disposed of annually. **The total gallons listed here for each chemical must equal the total gallons listed in Section A for the same chemical.**

Solvent	Gallons Typically Stored On Site	GALLONS DISPOSED ANNUALLY						Total Gallons Stored, Used, or Disposed Annually
		Discharged In Wastewater	Evaporated During Usage	Reclaimed On-site	Shipped Off-site	Consumed or Retained In Product	Other (Indicate Gallons & Disposal Method)	

Section C – Wastewater Analysis:

Has your process wastewater ever been analyzed for any or all of the toxic organic compounds or solvents listed in Section A?

_____ Yes _____ No

If yes, please attach a copy of the analysis. If no, this monitoring must be conducted and the analytical results for each toxic organic compound and solvent listed in Section A must be attached to the plan.

Section D – Solvent Process Operations:

1. For each of the toxic organic compounds or solvents listed in Section A, provide a brief description of the process in which the chemical is used and describe in detail the work methods used to prevent and prohibit toxic organic and solvent dragout, drippage and spillage from entering the wastewater discharged from the facility.

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.

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.

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, including the possibility of fine

and imprisonment for knowing violations. I hereby certify that based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for Total Toxic Organics (TTO), to the best of my knowledge and belief, no dumping of concentrated toxic organic compounds into the wastewaters has or does occur. I further certify that this facility is implementing and will abide by this Toxic Organic/Solvent Management Plan as submitted to the NBC.

SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE

TITLE

DATE

List of Toxic Pollutants

The following List of Toxic Pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act.

Volatiles

EPA Method 624

arolein
acrylonitrile
benzene
bromoform
carbon tetrachloride
chlorobenzene
chlorodibromomethane
chloroethane
2-chloroethylvinyl ether
chloroform
dichlorobromomethane
1,1-dichloroethane
1,2-dichloroethane
1,1-dichloroethylene
1,2-dichloropropane
1,3-dichloropropylene
ethylbenzene
methyl bromide
methyl chloride
methylene chloride
1,1,2,2-tetrachloroethane
tetrachloroethylene
toluene
1,2-trans-dichloroethylene
1,1,1-trichloroethane
1,1,2-trichloroethane
trichloroethylene
vinyl chloride

Acid Compounds

EPA Method 625

2-chlorophenol
2,4-dichlorophenol
2,4-dimethylphenol
4,6-dinitro-o-cresol
2,4-dinitrophenol
2-nitrophenol
4-nitrophenol
p-chloro-m-cresol
pentachlorophenol
phenol
2,4,6-trichlorophenol

Base/Neutral

EPA Method 625

* acenaphthene
* acenaphthylene
* anthracene
benzidine
* benzo (a) anthracene
* benzo (a) pyrene
* 3,4-benzofluoranthene
* benzo (ghi) perylene
benzo (k) fluoranthene
bis (2-chloroethoxy) methane
bis (2-chloroethyl) ether
bis (2-chloroisopropyl) ether
bis (2-ethylhexyl) phthalate
4-bromophenyl phenyl ether
butylbenzyl phthalate
2-chloronaphthalene
4-chlorophenyl phenyl ether
* chrysene
* dibenzo (a, h) anthracene
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
3,3-dichlorobenzidine
diethyl phthalate
dimethyl phthalate
di-n-butyl phthalate
2,4-dinitrotoluene
2,6-dinitrotoluene
di-n-octyl phthalate
1,2-diphenylhydrazine
(as azobenzene)
* fluoranthene
* fluorene
hexachlorobenzene
hexachlorobutadiene
hexachlorocyclopentadiene
hexachloroethane
* indeno (1,2,3-cd) pyrene
isophorone
* naphthalene
* nitrobenzene
N-nitrosodimethylamine
N-nitrosodi-n-propylamine
N-nitrosodiphenylamine
* phenanthrene
* pyrene
1,2,4-trichlorobenzene

Pesticides

EPA Method 625

aldrin
alpha – BHC
beta – BHC
gamma – BHC
delta – BHC
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

***NBC SIGNIFICANT INDUSTRIAL USER
ANNUAL INSPECTION CHECKLIST***

NARRAGANSETT BAY COMMISSION



Annual Inspection Checklist
For Significant Industrial Sewer Users

Company Name: Eng/Tech:
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?

Multiple horizontal lines for handwritten response to question (a).

(b) Has required work been completed? Yes No N/A
If no, when will it be completed?

Multiple horizontal lines for handwritten response to question (b).

(c) What work has facility initiated on its own to improve wastewater discharge?

Multiple horizontal lines for handwritten response to question (c).

(d) Has facility expanded/scaled down operations? Yes No
If yes, describe.

Multiple horizontal lines for handwritten response to question (d).

(e) Have all monitoring reports been submitted on time? Yes No
If no, discuss ramifications of late submittals/SNC with user.

Multiple horizontal lines for handwritten response to question (e).

(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:

	#1	#2	#3
pH of buffer			
pH using NBC instrument			
pH registered by facility instrument			
Expiration date of buffer			

If discrepancy was observed, a post inspection calibration check must be performed at Pretreatment lab on the same day as the inspection and the following must be completed:

- a) NBC Instrument pH in buffer 4.0: _____
- b) NBC Instrument pH in buffer 7.0: _____
- c) NBC Instrument pH in buffer 10.0: _____

(f) Is the facility required to maintain a logbook? Yes No

If yes, is the logbook being maintained? Yes No

Does the logbook properly document the following?

(i) Batch discharges? Yes No N/A

- | | | | |
|---|-----|----|-----|
| (ii) Chemicals used for pretreatment system? | Yes | No | N/A |
| (iii) Sludge generated on a daily, weekly or monthly basis? | Yes | No | N/A |
| (iv) Maintenance performed on pretreatment system? | Yes | No | N/A |
| (v) Visual inspecting data for boiler room discharges? | Yes | No | N/A |
| (vi) Grease interceptor inspection? | Yes | No | N/A |
| (vii) Other special logbook requirements | Yes | No | N/A |

If yes, please specify _____

- (g) Have Hazardous Waste Manifest forms been properly maintained on site?
 Yes No N/A

Part IV - Spill, Slug and Solvent Discharge Control

- (a) Is a Spill & Slug Prevention Control Plan (SSPCP) necessary based upon the facility inspection? Yes No
- (b) Has a SSPCP been submitted? Yes No N/A
- (c) Has a SSPCP been approved? Yes No N/A

(d) Detail how a spill in the process and pretreatment areas would be contained.

(e) Detail how a spill in the chemical storage area(s) would be contained: (Be sure to check both inside and outside storage areas, outside solvent holding tanks, etc.). _____

- (f) Are spill control measures physically in place as stated in SSPCP?
 Yes No N/A

* Check for open drains or other direct sewer access points.

(g) Is spill control in the boiler room satisfactory? Yes No N/A
If no, what will be required to ensure proper containment in the boiler room.

(h) Based upon the facility inspection and observations noted in d, e, f, and g above, is the existing SSPCP accurate and sufficient? Yes No N/A
If no, why? _____

(i) Is submission of a Toxic Organic/Solvent Management Plan (TO/SMP) necessary? Yes No

(j) Has TO/SMP been submitted? Yes No N/A

(k) Has TO/SMP been approved? Yes No N/A

(l) Is there proper containment of solvents as stated in the TO/SMP? Yes No N/A

(m) Is the existing TO/SMP accurate and sufficient? Yes No N/A

Part V - Process Flow Measurement

(a) How many flow meters are used to measure process wastewater discharges?

(b) Complete the following table for each process

<u>Location</u>	<u>Process Operation Monitored</u>	<u>Readings</u>	<u>Units</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(c) Are these flow meter readings an accurate measurement of process flows? Yes No N/A

(d) If not, list user's estimate of the percent of total flow used for process water.
_____ %

- (e) Based upon _____, for the period from _____ to _____, the average daily process flow is _____ GPD.
- (f) Based upon daily flow calculation, is user properly classified for permit fee billing purposes? Yes No N/A

Part VI - Sampling Procedures

- (a) Where should representative samples be taken for NBC and self-monitoring?

- (b) Are samples taken here presently? Yes No
 If no, why not? _____

- (c) Are non-contact cooling water or other dilution streams discharged upstream of the sampling location? Yes No

* Check degreaser cooling water and steam condensate discharge lines.

- (d) Must the combined wastestream formula be used to determine compliance with EPA categorical pretreatment standards? (e.g. Does wastewater discharge through more than one (1) location?) Yes No

- (e) Does the firm conduct its own sample collection? Yes No
 If not, specify: _____

- (f) Is method of sample collection acceptable? Yes No
 If no, why not? _____

- (g) If firm is a metalfinisher, does cyanide sampling satisfy EPA requirements? Yes No N/A
 If no, what must be changed? _____

- (h) Are sample collection procedures adequate?

- (i) Samples refrigerated after collection? Yes No N/A

(ii) Proper preservation techniques used? Yes No N/A

(iii) How long are samples held before delivery to the laboratory for analysis?

PART VII - LABORATORY ANALYSIS

(a) Is a commercial laboratory used? Yes No

If so, which lab? _____

(b) Is commercial lab state certified? Yes No N/A

(c) For in-house analysis:

(i) Are duplicate samples analyzed? Yes No N/A

(ii) Are spiked samples used? Yes No N/A

(iii) Are equipment and instruments calibrated and maintained?
Yes No N/A

(iv) Is there a quality assurance plan in effect? Yes No N/A

(v) Is in-house lab state certified? Yes No N/A

(vi) If yes, request and attach copy of in-house lab certification and approved parameters.

Part VIII - User Education

(a) Educate users about each of the following:

Significant Non-Compliance (SNC) Criteria: Yes No

NBC Mission Statement: Yes No

Purpose and Types of NBC Inspections: Yes No

Monitoring and Reporting Requirements/Procedures: Yes No

Comments: _____

***NBC INDUSTRIAL USER
INSPECTION CHECKLIST***

NARRAGANSETT BAY COMMISSION

Inspection Checklist
For Industrial Users

Company Name: _____ Tech./Eng.: _____
Person(s) Met With: _____ Date: _____
Company Classification: _____

Part I – Requirements/Progress Since Last Inspection

- (a) What was required of the firm since last inspection? _____

- (b) Has required work been completed? Yes No
If no, when will it be completed? _____

Part II –Pretreatment Equipment and Process Operations

- (a) List areas of the facility that were inspected:
 Process Operations
 Pretreatment Operations
 Other: _____
- (b) Have changes been without NBC notification and approval Yes No
If yes, detail changes. _____

Part III – Maintenance and Record Keeping

- (a) Is pH recording required? Yes No
- (b) 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.
- (c) How often are pH probes cleaned and calibrated? _____
- (d) Is the facility required to maintain a logbook? Yes No
If yes, is the logbook being maintained? Yes No N/A
If no, please specify _____

Part IV – Spill, Slug, and Solvent Discharge Control

- (a) Does the facility have a Spill & Slug Prevention Control Plan (SSPCP)? __ Yes __ No __ N/A
- (b) Has a SSPCP been approved? __ Yes __ No __ N/A
- (c) Are spill control measures physically in place as stated in SSPCP? __ Yes __ No __ N/A

If no, Explain _____

* Check for open drains or other direct sewer access points.

- (d) Does the facility have a Toxic Organic/Solvent Management Plan (TO/SMP)? __ Yes __ No __ N/A
 - (e) Has TO/SMP been submitted? __ Yes __ No __ N/A
 - (f) Has TO/SMP been approved? __ Yes __ No __ N/A
 - (g) Is the existing TO/SMP accurate and sufficient? __ Yes __ No __ N/A
- If no, Explain _____

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

Location	Process Operation Monitored	Readings	Units
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Part VI – Comments/Requirements:

Engineers Comments: _____

What will be required of the firm? _____

If this is an industrial vacation shutdown inspection, please provide a copy of the NBC notice detailing the proper disposal methods that should be used during the annual facility vacation shutdown.

Is the facility shutting down for vacation? __ Yes __ No __ N/A
If yes, provide dates _____

***NBC 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? [gu "P q
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?, [gu""P q
 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 facility required to maintain an amalgam separator logbook? Yes No
- (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: _____

What will be required of firm? _____

***NBC 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 N/A
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 N/A

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 | N/A |
| If yes, logbook is required to be maintained | Daily | Weekly | Monthly |
| Is the logbook being maintained at the required frequency? | Yes | No | |
-
- | | | | |
|--|-----|----|-----|
| (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 | N/A |
| Permit/Logbook Requirements: | Yes | No | N/A |
| Monitoring and Reporting Requirements/Procedures: | Yes | No | N/A |

Comments: _____

What will be required of firm? _____

***NBC SEPTAGE TRUCK
INSPECTION CHECKLIST***

Lincoln Septage Facility
Septage Truck Inspection Checklist

Inspector : _____
Inspection Date: _____
Septage Hauler: _____
Vehicle Inspected: _____
Drivers Name: _____

Vehicle Inspection

Registration OK?	<input type="checkbox"/> Yes	<input type="checkbox"/> No – Call State Police
Insurance Card Ok?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
NBC Volume Sticker In Place	<input type="checkbox"/> Yes	<input type="checkbox"/> No – Issued NOV
NBC Permitted User Sticker in Place	<input type="checkbox"/> Yes	<input type="checkbox"/> No – Issued NOV
NBC Computer Chip In Place	<input type="checkbox"/> Yes	<input type="checkbox"/> No – Issued NOV

Paperwork Review

Manifest Properly Completed Yes No – Issued Nov and Refuse Load.

If No, List Problems: _____

Waste Discharge Inspection

pH of Waste: _____ s.u.

Was grease observed in Sample? Yes No - If yes, Refuse Load and Collect Sample for Evidence.

Was grease observed in lakeside? Yes No - If yes, Stop Load Discharge and Collect Sample.

Educational Procedure Review

Manifest Paperwork Completion procedure was reviewed with driver Yes No
Grease Policy reviewed with driver Yes No

Other 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):	_____	_____	_____

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*

Parameter	Maximum Daily Concentration Limit (mg/l)	Monthly Average Concentration (mg/l)
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
Parameter	Limitation (Maximum)	
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 - 11.0 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)

	#1	#2	#3
Closing Reading:	_____	_____	_____
Opening Reading:	_____	_____	_____
Total:	_____	_____	_____
Units (Circle One):	Cubic Feet/Gallons	Cubic Feet/Gallons	Cubic Feet/Gallons
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*

Parameter	Maximum Daily Concentration Limit (mg/l)	Monthly Average Concentration (mg/l)
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
Parameter	Limitation (Maximum)	
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 - 11.0 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.



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									
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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)



May 13, 2016

Mr. Alan Cantara
RISD - Washington Building
2 College Street
Providence, RI 02903

Dear Mr. Cantara:

The sample results for which were received by this office on May 09, 2016 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
4/29/2016	ZINC	Grab	9.98	LOCAL	2.61	1.48

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. Frank DeFruscio
DFI-EP, LLC
1425 Cranston Street
Cranston, RI 02920

September 28, 2016

Dear Mr. DeFruscio:

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 September 06, 2016. 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
9/6/2016	COPPER	Composite	30.1	EPA	3.38	2.07
9/6/2016	COPPER	Composite	30.1	LOCAL	1.20	1.20
9/6/2016	ZINC	Composite	55	EPA	2.61	1.48
9/6/2016	ZINC	Composite	55	LOCAL	2.61	1.48
9/6/2016	NICKEL	Composite	14.3	EPA	3.98	2.38
9/6/2016	NICKEL	Composite	14.3	LOCAL	1.62	1.62
9/6/2016	CYANIDE	Composite	66.9	EPA	1.20	0.65
9/6/2016	CYANIDE	Composite	66.9	LOCAL	0.58	0.58

As a condition of your Wastewater Discharge Permit, these discharge limitations must be met at all times. Failure to meet the standards may result in the Commission initiating enforcement action against your firm and the publication of your company's name in the Commission's annual list of firms in Significant Non-Compliance which is published each year in the PROVIDENCE JOURNAL. Based upon these results, you must immediately resample your process discharge for the parameter(s) in violation noted above. You must continue this weekly sampling until four (4) consecutive weekly reports indicate full compliance with NBC discharge limitations. Results must be submitted for NBC review within three (3) weeks from the sampling date.

Please note that the NBC Office of Pollution Prevention is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848. If you should have any questions regarding this letter, contact me at 461-8848.

Sincerely,

Nathan P. Daggett
Pretreatment Engineer



WASTEWATER SAMPLE ANALYSIS

Company Name: DFI-EP, LLC
Company Address: 50 Waterman Avenue
North Providence, RI 02911
Location Name: Sample Location # 1
Type of Sample: Composite
Date of Sample: September 06, 2016

Parameter	Concentration (mg/l)
AMMONIA	2.34
ARSENIC	0.005
CADMIUM	0.068
CHROMIUM	1.15
COPPER	30.1
CYANIDE	66.9
LEAD	0.075
NICKEL	14.3
NO3+NO2	21.8
SILVER	0.048
Seasonal Total Nitrogen	26.84
TKN	5.04
Total Nitrogen	26.84
ZINC	55

Review By:

Nathan P. Daggett
Pretreatment Engineer

NOTICE OF VIOLATION
AVERAGE LIMIT VIOLATION



August 31, 2016

Mr. Kenneth Barthlemy
Teknicote, Inc.
10 New Road, Suite 400
Rumford, RI 02916

Dear Mr. Barthlemy:

The results of sampling conducted at your firm for the month of July-2016 show that you are in violation of average discharge limitations for the following:

Sample Location # 1

Parameter	# of Analyses	Standard Type	Avg. Conc.	Avg. Limit	Type
LEAD	4	LOCAL	0.33	0.29	NBC MONTHLY

As a condition of your Wastewater Discharge Permit and as required by U.S. EPA regulations, monthly average discharge limitations must be met at all times. Failure to meet the monthly average standards may result in the NBC initiating enforcement action against your firm and the possible publication of your company name in the NBC annual list of firms in Significant Non-Compliance which is published each year in the PROVIDENCE JOURNAL. Therefore it is important to always be in compliance with the monthly average discharge concentration, in addition to the maximum discharge limit. It is strongly recommended that you sample early each required sampling month to allow adequate time to resample in that month, should the initial result indicate that the monthly average limit was exceeded.

Please note that the NBC Office of Pollution Prevention is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848 Ext. 352. If you should have any questions regarding this letter, contact me at 461-8848 Ext. 490.

Sincerely,



Nathan P. Daggett
Pretreatment Engineer

Notice of Violation
Failure to Meet Standards (Manhole)



July 11, 2016

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 June 2, 2016 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</u> <u>(mg/L)</u>	<u>Daily Maximum</u> <u>(mg/L)</u>	<u>Average</u> <u>(mg/L)</u>
Copper	Composite	2.03	1.20	1.20

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 July 29, 2016 detailing the cause of the high concentration of metals with 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: June 2, 2016
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	0.107	2.03
Lead	<0.075	<0.075
Nickel	<0.050	1.46
Silver	<0.025	0.0261
Zinc	0.18	0.169
Cyanide	0.0051	0.0287

Reviewed by:

Nathan J. Dean
Assistant Pretreatment Manager

**Notice of Violation
Failure to Immediately Report Violation**



October 24, 2016

Mr. Silvio Soares
Whole Foods Market Group, Inc.
261 Waterman Street
Providence, RI 02906

Dear Mr. Soares:

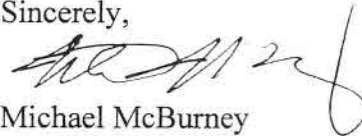
The Self-Monitoring Compliance report which was received by this office on October 21, 2016 indicated non-compliance with the NBC discharge limitations. EPA regulations, 40CFR. 403.12g(2), require that you notify the Narragansett Bay Commission (NBC) within 24 hours of becoming aware of this violation.

You failed to comply with this regulation since you did not notify the NBC 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 NBC 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 NBC 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 ext. 490.

Sincerely,



Michael McBurney
Pretreatment Technician

NOTICE OF VIOLATION
NOTICE OF PH VIOLATIONS



December 27, 2016

Mr. Joseph Accaoui
Tanury Industries
6 New England Way
Lincoln, RI 02865

Dear Mr. Accaoui

I have reviewed the November pH Monitoring Report submitted on December 21, 2016. Based upon this report, your facility has exceeded the pH discharge limitation as follows:

LOW LIMIT VIOLATIONS

3

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 Engineer



July 20, 2016

Mr. Ryan Clark
NGC INC.
P O Box 608
Narragansett, RI 02882

Dear Mr. Clark:

The sampling results for June which were received by this office on July 19, 2016 indicate that your firm has exceeded Narragansett Bay Commission (NBC) surcharge limitations for the following:

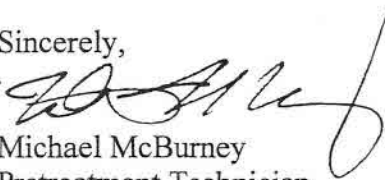
Sample Location # 1

Sample Date	Parameter	Sample Type	Sample Results	Surcharge Limitation
6/30/2016	TSS	GRAB	350	300
6/30/2016	BOD	GRAB	2100	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,


Michael McBurney
Pretreatment Technician

NOTICE OF VIOLATION
FAILURE TO SUBMIT COMPLIANCE REPORT

October 03, 2016



Mr. Frank A. DiFruscio
DiFruscia Industries, Inc.
1425 Cranston Street
Cranston, RI 02920

Dear Mr. DiFruscio:

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

August-2016

To date, the Commission has not received a copy of these analytical results. Until a certified copy of the results and a Self-Monitoring Compliance Report are received, you are in violation of the terms of your permit. Failure to submit compliance monitoring results within thirty (30) days of the due date will result in your firm being in Significant Non-Compliance with the NBC and EPA regulations and will automatically result in the publication of the name of your firm in the Providence Journal. Please note that the NBC will bill you for the cost of this public notice. In addition, the Commission may initiate enforcement action against your firm for failing to submit reports on time. Should such an enforcement action be initiated, administrative penalties of up to \$25,000 per violation per day can be assessed.

Sincerely

A handwritten signature in black ink, appearing to read "Abigail Bernier".

Abigail Bernier
Principal Pretreatment Eng.

NOTICE OF VIOLATION
FAILURE TO SUBMIT PH MONITORING REPORT



December 01, 2016

Mr. Gilberto Arteaga
Accent Plating Company
25 Esten Avenue
Pawtucket, RI 02860

Dear Mr. Arteaga:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit pH results for the month(s) of:

Sample Location # 1
October 2016

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 "N. Daggett", is written over a faint, illegible printed name.

Nathan P. Daggett
Pretreatment Engineer

NOTICE OF VIOLATION
FAILURE TO SUBMIT CERTIFICATION OF NO DISCHARGE



January 5, 2017

Mr. Alex Belykh
Galvanique
1340 Hartford Avenue
Johnston, RI 02919-7132

Dear Mr. Belykh:

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:

November 2016

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 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 black ink, appearing to read "N. Daggett".

Nathan P. Daggett
Pretreatment Engineer

NPD:smb

**NOTICE OF VIOLATION
FAILURE TO SUBMIT BMP CERTIFICATION**



January 04, 2017

Dr. Anthony Paolucci
Anthony Paolucci Family Dentists
931 Smith Street
Providence, RI 02908

Dear Dr. Paolucci:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit Best Management Practice (BMP) Certification for the period ending:

October - 2016

To date, the Narragansett Bay Commission (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 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,

A handwritten signature in black ink, appearing to read "Michael McBurney".

Michael McBurney
Pretreatment Technician

MM:ad

NOTICE OF VIOLATION
FAILURE TO ANALYZE FOR ALL REQUIRED PARAMETERS



November 15, 2016

Mr. John D'Agostino
Eagle Laundry, Inc.
411 Charles Street
Providence, RI 02904-2209

Dear Mr. D'Agostino:

I have reviewed the September 2016 Self-Monitoring Compliance Report you submitted on November 9, 2016. In accordance with the conditions of your permit, you were to have analyzed the sample from the final discharge line, Sample Location #1 for BOD, TSS, and Total Oil and Grease. The aforementioned sample was not analyzed for BOD and TSS. In order to fulfill this monitoring requirement, you must collect an additional sample from the aforementioned sample location by November 30, 2016. The sample must be analyzed for BOD and TSS and the analytical results must be submitted by December 30, 2016.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Abigail Bernier".

Abigail Bernier
Principal Pretreatment Engineer

AB:smb

NOTICE OF VIOLATION
FAILURE TO SATISFY NBC REQUIREMENTS



January 5, 2017

Mr. Adam Tominsky
Rand Whitney Southeast Container, LLC
455 Narragansett Park Drive
Pawtucket, RI 02861-4321

Dear Mr. Tominsky:

Per the requirements of letter(s) from this office, the following item was required to be completed and/or submitted by the due date indicated below:

<u>Required Submittal</u>	<u>Notice</u>	<u>Issue Date</u>	<u>Due Date</u>
Resampling results for Copper	LETTER	11/03/2016	12/30/2016

You must satisfy the past due Narragansett Bay Commission (NBC) requirement as detailed in the above referenced document. Your failure to complete the aforementioned requirement within thirty (30) days from the specified due date will place your firm in Significant Non-Compliance (SNC) with Commission regulations and will automatically result in the publication of the name of your firm as a violator in the PROVIDENCE JOURNAL. Your continued failure to complete this requirement may result in the initiation of enforcement action against your firm. Please note that the Commission can assess administrative and civil penalties of up to \$25,000 per violation per day should an enforcement action be initiated.

If you should have any questions regarding this matter, contact me at 461-8848, ext. 490.

Sincerely,



Nathan P. Daggett
Pretreatment Engineer

NPD:smb

NOTICE OF VIOLATION
LETTER OF DEFICIENCY



July 1, 2016

Mr. Mark Bouchard
Surface Coatings Division, MFB LLC
P. O. Box 27039
Providence, RI 02907-0549

Certified Mail
Return Receipt Requested

91 7108 2133 3937 9654 8386

Dear Mr. Bouchard:

This letter serves to summarize the Narragansett Bay Commission (NBC) annual inspection of your facility conducted on May 24, 2016. During the inspection, the following deficiency was noted:

Your firm has not been reporting effluent pH values as accurately as required by the NBC. Effluent pH values must be reported directly from the chart to an accuracy of 0.1 standard units (s.u.). Please do not hesitate to contact this office if you have any questions regarding the NBC pH reporting requirements. NBC staff is available to provide assistance regarding this matter.

Failure to correct the above-mentioned deficiency 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.

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.

In addition, your firm was provided with a copy of the NBC notice detailing the proper disposal methods that should be utilized during the annual facility vacation shutdown. Thank you in advance for your cooperation to ensure proper waste disposal during the vacation shutdown period.

If you have any questions, please contact me at 461-8848, ext. 490.

Sincerely,

Ian E. Jardin
Pretreatment Engineer

IEJ:smb

NARRAGANSETT BAY COMMISSION

ADMINISTRATIVE ORDER #FP-01-15

IN THE MATTER OF:

DFI-EP, LLC

**DFI-EP, LLC
20 Starr Street
Johnston, RI 02911**

**COMPLIANCE ORDER
AND
PENALTY ASSESSMENT**

LEGAL AUTHORITY

The following findings are made and order issued pursuant to the authority vested in the Narragansett Bay Commission (“NBC”) under Rhode Island General Laws (“RIGL”) Title 46 Chapter 25, the Narragansett Bay Commission Act (the “Act”) as amended and the NBC *Rules and Regulations for Use of Wastewater Facilities within the Narragansett Bay Commission District* (“Rules and Regulations”). The Act established NBC to acquire, plan, construct, extend, improve, operate and maintain the sewerage system and treatment facilities in the district. The Act authorizes NBC to collect fees, charges, and assessments from any person so assessed. Further, the Act states that each person so assessed shall pay the fees, charges, or assessments within the time frame prescribed by the rules and regulations of NBC. The Act also authorizes NBC to establish a sewage pretreatment program and to enforce any violations of the Act and any rule, regulation, permit, or order issued pursuant thereto.

RIGL § 46-25-25.2 prescribes that persons violating provisions § 46-25-25 through § 46-25-25.3 of the Act or of any permit, rule, regulation, or order issued pursuant thereto shall be subject to a civil penalty of not more than twenty-five thousand (\$25,000) dollars per day for each violation and authorizes NBC to obtain actual costs and reasonable attorney's fees incurred by NBC in seeking compliance, penalties or damages. Furthermore, RIGL § 46-25-25.3 provides that any person found guilty of violating, willfully or with criminal negligence, any of the aforementioned provisions or of any permit, rule, or regulation issued pursuant thereto shall be punished by a fine of not more than twenty-five thousand

(\$25,000) dollars and/or imprisonment of not more than one year for each enumerated violation.

Section 10.1 of the Rules and Regulations prescribes that NBC may implement administrative and/or judicial responses if a user is in violation of any provision of state or Federal requirements, the Act, the Rules and Regulations, a permit, or an order issued by NBC. Administrative penalties are assessed based on the penalty matrix contained in the Rules and Regulations Article 10.

STATEMENT OF FACTS

1. DFI-EP, LLC ("DFI") is a limited liability company organized under the laws of the State of Rhode Island and is registered with the Rhode Island Secretary of State.
2. DFI is a user of NBC's facilities as defined by Article 2 of the Rules and Regulations.
3. NBC issued DFI's most recent Wastewater Discharge Permit (P1106-355-0419) (the "Permit") on May 23, 2014.
4. According to the Permit, DFI is required to monitor effluent by collecting a composite sample over one full normal operating day during the months of February, April, June, August, October, and December until the expiration of the Permit. The sample is to consist of equal volume grab samples collected at least every half hour over the operating day or collected continuously with a composite sampler. The samples are to be collected from DFI's effluent monitoring station after the final pH neutralization tank, Sample Location #1.
5. According to Section 5.4(A) of the Rules and Regulations, NBC's Effluent Discharge Limitations for the Field's Point District for cadmium are 0.11 mg/l for daily maximum concentration and 0.07 mg/l for monthly average concentration. For copper, the limits are 1.20 mg/l for daily maximum concentration and 1.20 mg/l for monthly average concentration. For nickel, the limits are 1.62 mg/l for daily maximum concentration and 1.62 mg/l for monthly average concentration. For zinc, the limits are 2.61 mg/l for daily maximum concentration and 1.48 mg/l for monthly average concentration. For cyanide, the limits are 0.58 mg/l for daily maximum concentration and 0.58 mg/l for monthly average concentration.

6. DFI has exceeded the NBC discharge limitations on twenty-six (26) occasions since beginning operations in May 2014. There have been three (3) cadmium violations, two (2) copper violations, eleven (11) nickel violations, three (3) zinc violations, and seven (7) cyanide violations (See Exhibit A).
7. Five (5) of these violations occurred in 2014 and DFI attributed these violations to utilizing a previous owner's pretreatment system which was not functioning properly.
8. Twenty-one (21) of the remaining discharge violations occurred in 2015.
9. Section 10.1 of the Rules and Regulations prescribes that NBC may implement administrative and/or judicial responses if a user is in violation of any provision of state or Federal requirements, the Act, the Rules and Regulations, a permit, or an order issued by NBC.

THEREFORE, based on the above findings, DFI-EP, LLC. is hereby notified of the following violations:

Violation A: Failure to meet effluent discharge limitations on twenty-six (26) occasions in violation of the Permit, the Rules and Regulations, and the Act.

**THE FOLLOWING LAWS AND REGULATIONS APPLY
TO THE ABOVE VIOLATIONS:**

*(The citations listed below represent only selected excerpts from
the referenced statutes, codes, rules and regulations. Actual
documents should be consulted for complete texts.)*

EPA - CODE OF FEDERAL REGULATIONS

40 CFR § 403.2 Objectives of general pretreatment regulations

By establishing the responsibilities of government and industry to implement National Pretreatment Standards this regulation fulfills three objectives:

- (a) To prevent the introduction of pollutants into POTWs which will interfere with the operation of a POTW, including interference with its use or disposal of municipal sludge;
- (b) To prevent the introduction of pollutants into POTWs which will pass through the treatment works or otherwise be incompatible with such works; and
- (c) To improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

GENERAL LAWS OF RHODE ISLAND

General Powers: § 46-25-5:

(10) To establish a sewage pretreatment program, and to require as a condition, to the grant or reissuance of any approval, license, or permit required under the program, that the person applying for the approval, license, or permit, pay to the commission a reasonable fee based on the cost of reviewing and acting upon the application and based on the costs of implementing the program...

(16) To issue orders of general or specific applicability to carry out the purposes of the project.

(17) To have and exercise all powers necessary or convenient to effect its purposes.

(18) To impose administrative penalties in accordance with the provisions of § 46-25-25.4.

Orders as to pretreatment of sewage: § 46-25-25:

(a) Without limiting the generality of the foregoing, the authority hereby vested in the commission shall include the authority to limit, reject, or prohibit any direct or indirect discharge of pollutants or combination of pollutants, as defined by applicable federal or state law, into the facilities of the project; to require that any person or class of user shall cause pollutants from his or her property, prior to their entry into the facilities of the project, to be submitted to such pretreatment standards and requirements as the commission may prescribe by rule or regulation. The commission shall prescribe such rules and regulations for pretreatment as in the opinion of the commission,

(1) Are required by applicable federal or state law,

(2) Are required under the terms of the project's federal permit(s), or

(3) Are necessary and appropriate for the project.

(b) The commission shall have the authority to issue or deny permits to any person for the direct or indirect discharge of any pollutants into the facilities of the project; to require the development of a compliance schedule by each person to insure compliance with such pretreatment as the commission may prescribe. No person shall discharge any pollutant into the facilities, except as in compliance with the provisions of this section, and any rules and regulations promulgated hereunder, and pursuant to the terms and conditions of a permit.

(c) The commission may, by regulation, order, permit, or otherwise require any person who discharges into the facilities of the project to:

(1) Establish and maintain such records;

(2) Make such reports;

(3) Install, calibrate, use, and maintain such monitoring equipment or methods, including where appropriate, biological monitoring methods;

(4) Sample such discharges and effluents, in accordance with such methods, at such locations, at such intervals, and in such manner as the commission shall prescribe; and

(5) Provide such other information relating to discharges into the facilities of the project as the commission may reasonably require to insure compliance with prescribed pretreatment. The information shall include, but not be limited to, those records, reports, and procedures required by applicable federal law.

(d) Notwithstanding any other provision of this section, the commission shall have the authority, and shall prescribe the appropriate procedures, after informal notice to the discharger, immediately and effectively to halt or prevent any discharge of pollutants into the facilities of the project which reasonably appears to present an imminent endangerment to the health or welfare of persons...

Inspection powers: §46-25-25.1:

(a) The commission is authorized to carry out all inspection, surveillance, and monitoring procedures necessary to determine, independent of information supplied by any person who discharges into the facilities of the project, compliance or noncompliance by the person with the pretreatment requirements prescribed by the commission.

(b) The commission or the duly authorized employees and agents of the commission, upon presenting identification and appropriate credentials, is authorized:

(1) To enter, without delay and at reasonable times, those premises (public or private) of any person or class of user, either receiving services from the commission or applying to services from the

commission, in which a discharge source or treatment system is located or in which records required to be maintained pursuant to §46-25-25, are kept;

(2) During regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, to have access to and to copy any records, inspect any monitoring equipment or method required pursuant to §46-25-25, and sample any effluents which the owner or operator of the discharge source is required to sample under §46-25-25, and any rules and regulations adopted pursuant thereto.

(c) Any person obstructing, hindering, or in any way causing to be obstructed or hindered the commission or any of its employees or agents in the performance of their duties, or who shall refuse to permit the commission or any of its employees or agents entrance into any premises, buildings, plant, or equipment, or other places belonging to or controlled by the person, in the performance of his or her duties as such, shall be subject to the civil and criminal penalties set forth in §§ 46-25-25.2 and 46-25-25.3.

Civil penalties: §46-25-25.2:

(a) Any person who shall violate the provisions of §§ 46-25-25 – 26-25-25.3, or of any permit, rule, regulation, or order issued pursuant thereto, shall be subject to a civil penalty of not more than twenty-five thousand dollars (\$25,000) per day for each violation.

(b) The commission shall, in the same manner as cities and towns authorized under the provisions of §45-6-2.3(4), issue regulations to obtain actual costs and reasonable attorney's fees incurred by the commission in seeking compliance, penalties, or damages.

Criminal penalties: §46-25-25.3:

(a) Any person who shall be found guilty of violating, willfully or with criminal negligence, any of the provisions of §§ 46-25-25 -- 46-25-25.3 or of any permit, rule, or regulation issued pursuant thereto, or an order of the commission, shall be punished by a fine of not more than twenty-five thousand dollars (\$ 25,000) or by imprisonment for not more than one year, or by both a fine or imprisonment; and every

person shall be deemed guilty of a separate and distinct offense for each day during which the violation shall be repeated or continued. Further, the person shall be liable for all damages directly related to the violation, including additional costs of handling and treating any prohibited wastes, and shall reimburse the commission for actual enforcement costs incurred by the commission, including reasonable attorney's fees and administrative costs.

(b) No person shall knowingly make any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under § 46-25-25 or 46-25-25.1 or by any permit, rule, regulation, or order issued under those sections, or shall falsify, tamper with, or knowingly render inaccurate any monitoring device or method required to be maintained under those sections or by any permit, rule, regulation, or order issued under those sections.

(c) No person shall discharge into any outlet within the district any sewage waste or other pollutants without a permit, except where suitable treatment has been provided in accordance with this chapter or the rules and regulations of the commission.

(d) No person shall construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of sewage waste or other pollutants within the district, except as otherwise provided by law or the rules and regulations of the commission.

(e) No person shall maliciously, willfully, or negligently breach, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment or dump garbage, refuse, or other material on land or right-of-way which is a part of the facilities of the project.

(f) No person shall uncover, make any connection with, or opening into, use, alter, or disturb any interceptor or appurtenance thereof, without first obtaining a written permit from the commission.

(g) No person shall discharge or cause to be discharged any unpolluted waters such as stormwater, groundwater, roof runoff,

subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any facilities of the project other than those discharges as are connected to an existing (prior to May 1, 1982) combined sewer in those areas in which a combined sewer is the only available means for disposal of unpolluted waters.

Enforcement authority and procedure: § 46-25-25.4:

(a) The commission shall have authority to seek legal or equitable relief in the federal court or in the superior court of Providence county to enforce the requirements of §§ 307(b) and (c), 402(b)(8) and other applicable sections of the Federal Water Pollution Control Act, also known as the Clean Water Act, 33 U.S.C. § 1251 et seq., and any regulations implementing those sections or authorized by this chapter and/or by chapter 12 of this title. Whenever, on the basis of any information available to the commission, the commission has reasonable grounds to believe that a person has violated any provision of §§ 46-25-25 through 46-25-25.6 or any permit, rule, regulation or order issued pursuant thereto the commission may institute administrative, civil or criminal proceedings in the name of the commission. The commission shall not be required to enter into any recognizance or to give surety for costs prior to instituting such proceedings. The commission has the authority to order any person who violates any provision of §§ 46-25-25 through 46-25-25.6, any permit, rule, regulation or order issued pursuant thereto to cease and desist the violation, or to remedy the violation and to impose administrative penalties.

**RULES AND REGULATIONS FOR THE USE OF
WASTEWATER FACILITIES WITHIN NARRAGANSETT BAY
COMMISSION DISTRICT**

ARTICLE 2-DEFINITIONS

USER means any person, firm, corporation, government or other entity that discharges, causes or permits the discharge of wastewater into the NBC's facilities

ARTICLE 5-DISCHARGE REQUIREMENTS, LIMITATIONS, AND PROHIBITIONS

5.4 Specific Facility Limitations

No person shall discharge or cause or allow to be discharged either directly or indirectly into the facilities, any substance, water or wastewater which has concentrations of the substances listed below in excess of the assigned discharge limitations. There will be no waivers or exceptions granted with respect to compliance with any of the limits listed below.

* All Parameters are for total metals, organics and cyanide

A. Field's Point Discharge Limitations:

Parameter*	Daily Maximum (Composite Sample for 1 day) (mg/l)	Average (10 day) (mg/l)
Cadmium (Cd)	0.11	0.07
Chromium (Cr)	2.77	1.71
Copper (Cu)	1.20	1.20
Cyanide (CN)	0.58	0.58
Lead (Pb)	0.60	0.40
Mercury (Hg)	0.005	0.005
Nickel (Ni)	1.62	1.62
pH Range at all times	5.0 -11.0 std. units	
Silver (Ag)	0.43	0.24
TTO	2.13	2.13
Zinc (Zn)	2.61	1.48

ARTICLE 8-WASTEWATER DISCHARGE PERMIT SYSTEM

8.5 Permit Conditions

Wastewater discharge permits shall be expressly subject to specific permit provisions contained therein as well as to provisions of these Rules and

Regulations and all other regulations, user charges and fees established by the NBC. Wastewater discharge permits may include such conditions as are reasonably deemed necessary by the NBC to prevent Pass Through or Interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal, protect ambient air quality, and protect against damage to the NBC's facilities. Such conditions may include, but are not limited to, the following:

- A. The average and maximum wastewater constituents and characteristics permitted in the process water discharges;
- B. Limits on rate and time of discharge or requirements for flow regulation and equalization;
- C. Requirements for installation of inspection and sampling facilities and specifications for self-monitoring;
- D. Requirements for the submission of periodic self-monitoring compliance reports which shall include, but not be limited to, volume or rates of flow, concentrations of controlled pollutants or other information which relates to the generation of waste;
- E. Requirements for maintaining and submitting technical reports and plant records relating to wastewater discharges;
- F. Daily average and daily maximum discharge rates, or other appropriate conditions when pollutants subject to limitations and prohibitions are proposed or present in the user's wastewater discharge permit;
- G. Compliance schedules;
- H. Requirements for installation of pretreatment systems, spill and slug-prevention control plans and solvent-management plans;
- I. Provisions for authorized NBC employees and agents to enter and inspect the premises, including provisions for copying records, inspecting monitoring equipment and sampling effluent;
- J. Compliance with Federal, state and other governmental laws, rules and regulations;
- K. Fees and costs including supplemental fees assessed because of the special nature of the user's effluent in accordance with the provisions of Article 5 and additional costs and fees based on the costs of enforcing these regulations or the permit, as in accordance with R.I.G.L. §46-25-5 (j);
- L. Signatory requirements; and
- M. Any other reasonable conditions necessary to ensure compliance with the provisions of R.I.G.L. §46-25-1 et seq., or any state and Federal laws, rules and regulations.

ARTICLE 9-WASTEWATER MONITORING AND REPORTING

9.3 Monitoring And Analysis of Process Wastewater

Sampling and analysis of industrial wastewater for the purpose of compliance determinations with respect to Article 5 prohibitions and limitations shall be done through industry self-monitoring and through monitoring done by the NBC. All analyses, including sampling results submitted in support of any application reports, evidence or required by any permit or order shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto or, if 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, in accordance with procedures approved by EPA. The NBC may, at its discretion, require an independent laboratory to conduct the sampling and analysis at the user's own cost.

A. Self-Monitoring Requirements:

- 1) Self-monitoring results must be accompanied by a certified laboratory analysis sheet, indicating the EPA approved test Rules and Regulations for Use of Wastewater Facilities Within the Narragansett Bay Commission District procedure for each parameter analyzed. The user must also submit a self -monitoring report with the results on a form prescribed by the NBC.
- 2) All Self-Monitoring Reports must be signed and certified in accordance with Section 9.10....
- 3) If any sampling performed by a user indicates any violation(s) of discharge limitations, the user shall notify the NBC within twenty-four (24) hours of becoming aware of the violation(s). The user shall repeat the analysis immediately for the parameters determined to be in violation and submit the resampling results to the NBC within thirty (30) days after becoming aware of the violation(s).

B. Sample Collection:

- 1) Except as indicated in (3) below, wastewater samples collected for purposes of determining user compliance with pretreatment standards and requirements must be obtained using flow proportional composite sample collection techniques. In the event that flow proportional sampling is not feasible, the NBC may authorize the use of a time proportional sampling.
- 2) For automatic samplers, the intake line hose must be at least 1/4 in. (0.6 cm) internal diameter and the velocity in the intake line must be maintained at least at 2 feet per second.

- 3) Samples for oil and grease, temperature, pH, cyanide, phenols, toxicity, sulfides, and volatile organic chemicals must be obtained using a grab sample.

C. Analysis of Wastewater Samples:

- 1) Laboratory analysis and sample preservation of industrial wastewater samples for user self-monitoring and compliance monitoring by the NBC shall be performed in accordance with EPA approved methods. Where applicable, the laboratory must be certified by the state in which it is located.

ARTICLE 10-ENFORCEMENT

10.1 Administrative Enforcement Options

The NBC may implement any combination of the following administrative and/ or judicial responses if a user is in violation of any provision of state or Federal requirements, the Rhode Island General Laws Title 46 Chapter 25 (the Act), these Rules and Regulations, a permit or an order issued by the NBC.

- (1) Issue a Notice of Violation;
- (2) Require the User to attend a mandatory compliance meeting at the NBC Corporate Office during business hours, or at any other reasonable time, to discuss its violations or alleged violations, the remedial actions that it might take, and the actions that the NBC might take under the Act and the Rules and Regulations;
- (3) Issue an Administrative Order requiring any action that the NBC is authorized to require;
- (4) Enter into a Consent Order or Settlement Agreement with the user;
- (5) Revoke, modify, deny, suspend, or refuse to renew a Permit issued under the Act;
- (6) Terminate or suspend sewer services provided to the user;
- (7) Assess a civil administrative penalty;
- (8) Institute a court action for civil penalties, criminal fines and/or other criminal punishment, injunctive relief, reimbursement of costs and/ or damages resulting from a violation or threatened violation; and/ or any other relief authorized by law or regulation.

10.3 Administrative Orders

A. Immediate Compliance Order

When the NBC finds that a user has violated or continues to violate these Rules and Regulations, the Act, a permit or order issued by the NBC, or any other pretreatment standard or requirement, the NBC may issue an order to the user responsible for the discharge, directing that the user come into compliance within a reasonable time period established by the NBC. Compliance Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including, but not limited to, the installation of pretreatment technology and/ or additional self-monitoring and management practices designed to minimize the amount of pollutants discharged to the sewer. A Compliance Order does not relieve the user of liability for any violation, including any continuing violation. Issuance of a Compliance Order shall not be a prerequisite to taking any other action against the user, including, but not limited to, assessment of an Administrative Penalty.

ORDER

THEREFORE, based on the above findings and violations, DFI-EP, LLC is hereby ORDERED to:

1. Submit a proposal to NBC regarding a plan to reduce effluent concentrations to comply with the Permit, the Rules and Regulations, and the Act within twenty-one (21) days of receipt of this Order.
2. After NBC's review and approval of DFI's proposal, within ninety (90) days after receipt of NBC's approval DFI must implement its plan to reduce effluent concentrations to comply with the Permit, the Rules and Regulations, and the Act.
3. Pay an Administrative Penalty to the Commission of **TWENTY-THREE THOUSAND AND FIVE HUNDRED DOLLARS (\$23,500)** within twenty-one (21) days of receipt of this Order.

Pursuant to RIGL § 46-25-25(4) and § 42-17.1-2(u) and Article 10 of NBC's Rules and Regulations, DFI has the right to file a written request with the Executive Director for a hearing on said alleged violations within ten (10) days of service of this notice to show cause why they should not be found in violation of NBC's Rules and Regulations and why enforcement action should not be taken against them. If a hearing is requested within the ten (10) day time period, NBC shall provide written notice to DFI of the date, time and place for the hearing. If DFI fails to request a hearing within the aforementioned time frame, this Order shall automatically become an immediate compliance order and DFI shall be deemed to have waived the right to an adjudicatory hearing on the above cited violations.

IF DFI-EP, LLC WAIVES THEIR RIGHT TO AN ADMINISTRATIVE HEARING WITHIN TEN (10) DAYS, DFI-EP, LLC IS DEEMED TO BE IN DEFAULT AND NBC WILL IMMEDIATELY TAKE STEPS TO ENFORCE THIS MATTER IN COURT. BE ADVISED THAT FAILURE TO COMPLY WITH THE TERMS OF THIS ORDER MAY SUBJECT USER TO CIVIL AND/OR CRIMINAL PENALTIES OF UP TO \$25,000 PER DAY PER VIOLATION PURSUANT TO RIGL § 46-25-25.2 AND § 46-25-25.3.

FOR THE COMMISSION:

1/14/16

Date



Mark Patrick McGuire, Esq.
Associate Legal Counsel

CERTIFICATION

I hereby certify that on the *January 14, 2016*, true and accurate copies of the within ADMINISTRATIVE ORDER were sent by certified mail, return receipt requested to the following individual(s):


1. Frank A. DeFruscio, Jr.
DFI-EP, LLC
50 Waterman Avenue
North Providence, RI 02911

2. Keith A. Parent
DFI-EP, LLC
50 Waterman Avenue
North Providence, RI 02911

3. Frank A. DeFruscio, Jr.
DFI-EP, LLC
20 Starr Street
Johnston, RI 02919

4. Keith A. Parent
DFI-EP, LLC
20 Starr Street
Johnston, RI 02919

1/14/16
Date


Junel Grande
Executive Paralegal

DFI-EP LLC
Analytical Results 5-2014 thru 10-2015

Sample Date	NBC Sample	Flow	Cd	Cr	Cu	Pb	Ni	Zn	CN	Ag	TTO	Total O & G	Misc	Violation
6/30/2014		2240			0.19		1.06	0.17						Y
7/15/2014	Y	913	0.112	0.276	0.476	0.075	1.87	0.11	0.004	0.025			As = .005	Y
8/5/2014	N	6230	0.02	0.05	0.09	0.17	1.57	0.03	0.09	0.01	0.031	1		N
8/6/2014		6140	0.02	0.05	0.05	0.05	0.85	0.02	0.06	0.01	0.036	1		N
8/7/2014		5980	0.02	0.05	0.03	0.05	0.77	0.01	0.05	0.01	0.04	1		N
8/8/2014		6420	0.02	0.05	0.03	0.06	0.69	0.02	0.05	0.01	0.038	1.5		N
10/21/2014		3570	0.02	0.05	0.03	0.06	0.69	0.02	0.05	0.01				N
12/8/2014	Y	3620	0.015	0.075	0.376	0.075	2.33	1.14	0.447	0.025			Ammonia = 9.9, As = .005	Y
12/23/2014		4310	0.02		0.05		0.21	0.03	0.28					N
12/24/2014		4310					0.27							N
12/29/2014		6740					0.3							N
12/30/2014		6630					0.32							N
1/14/2015	Y	273	0.016	0.075	0.125	0.075	2.45	1.53	2.51	0.025			AMMONIA = 22.5, As = .005	Y
2/23/2015		8220	0.02		0.11		0.5	0.05	0.03					N
2/24/2015		7230					0.63		0.08					N
2/26/2015		6870					0.42		0.05					N
2/27/2015	N	6280					0.31		0.07					N
3/11/2015	Y	182	0.281	0.674	5.3	0.075	3.99	5.67	12.9	0.049			As = .005, ammonia = 1.47	Y
4/21/2015		8800	0.02	0.05	0.17	0.05	1.85	0.03	1.76	0.05				Y
4/22/2015		9860	0.04		0.28		2.32	0.03	2.31					Y
4/23/2015		7930	0.04		0.28		3.22	0.04	2.45					Y
4/24/2015		8220	0.04		0.35		3.88	0.05	2.42					Y
5/6/2015	Y	117	1.82	0.075	2.17	0.075	3.82	1.76	73.2	0.086			Ammonia = 1.92, As = .013	Y
5/22/2015		9300	0.02	0.18	0.15	0.05	0.4	0.22	0.49	0.01				N
5/25/2015		5110	0.02		0.3		0.2	0.37	0.37					N
5/26/2015		8510	0.02		0.25		0.61	0.33	0.49					N
5/27/2015		9230	0.02		0.25		0.6	0.34	0.29					N
6/18/2015	Y	4750	0.054	0.939	0.998	0.075	9.79	6.08	0.437	0.025				Y
6/19/2015		5890	0.02		0.02		0.49	0.13	0.03					N
7/23/2015		8980					0.94	0.37						N
7/24/2015		8070					0.6	0.32						N
7/27/2015		7660					0.7	0.62						N
7/28/2015		9360					0.91	0.37						N
8/20/2015		4280	0.02		0.26		0.81	0.39	0.22					N
10/28/2015		6140	0.02	0.44	0.34	0.05	1.02	0.55	0.13	0.01				N

Exhibit A

**NARRAGANSETT BAY COMMISSION
ADMINISTRATIVE ORDER #FP-01-15**

IN THE MATTER OF:

**DFI-EP, LLC,
20 STARR STREET
JOHNSTON, RI 02911**

*
*
*

**COMPLIANCE ORDER &
PENALTY ASSESSMENT**

CONSENT ORDER

WHEREAS, Rhode Island General Laws (R.I.G.L.) Title 46, Chapter 25 (Act) established the Narragansett Bay Commission (NBC) to acquire, plan, construct, improve, operate and maintain the publicly owned sewage treatment facilities in the district. The Act vests authority in the NBC to establish a sewage pretreatment program and to enforce any violations of the provisions of the Act, and any rule, regulation, permit or Administrative Order issued pursuant thereto; and

WHEREAS, DFI-EP, LLC is a domestic limited liability company conducting business in the State of Rhode Island that owns and operates a facility located at 50 Waterman Avenue, North Providence, RI 02911; and

WHEREAS, Frank A. DeFruscio is the President of DFI-EP, LLC; and

WHEREAS, on or about May 23, 2014 the NBC issued Wastewater Discharge Permit #P1106-355-0419 (the "Permit") to DFI-EP, LLC and Frank DeFruscio (collectively the "Permittee") authorizing the discharge of process wastewater into the NBC's facilities so long as the Permittee adhered to the conditions of the Permit and complied with the NBC Rules and Regulations; and

WHEREAS, on or about January 14, 2016 the NBC issued Administrative Order and Assessment of Penalty #FP-01-15 against DFI-EP, LLC, alleging that it had violated the Act and the NBC's Rules and Regulations promulgated thereunder, by failing to comply with the terms of the Wastewater Discharge Permit by failing to comply with the NBC's effluent wastewater discharge limitations; and

WHEREAS, in lieu of proceeding to an Administrative Hearing, the NBC and the Permittee by their duly authorized representatives, have determined that it is in the best interest of all the parties and in the public interest to resolve the claims alleged in Administrative Order #FP-01-15 by the terms of the agreement set forth herein; and

WHEREAS, the NBC finds that this Consent Order is a reasonable and fair settlement and adequately protects the public interest in accordance with the Act; and

NOW, THEREFORE, before the taking of any testimony, without any adjudication or admission of any issue of fact or law, and upon consent and agreement of the parties to this Consent Order it is hereby **ORDERED** that:

JURISDICTION

1. The NBC has jurisdiction over the subject matter of this Consent Order and the parties consenting hereto pursuant to R.I.G.L. 46-25-25. In accordance with R.I.G.L. 46-25-25.4 the Superior Court for Providence County has jurisdiction to enforce the provisions of this Consent Order.

APPLICATION

2. The provisions of this Consent Order shall be binding upon the Permittee, its officers, agents, employees, successors and assigns.

TERMS AND CONDITIONS

3. **ADMINISTRATIVE PENALTY:**
 - A. Giving due acknowledgement to the improvements and upgrades implemented at Permittee's facility and the costs associated therewith, the NBC has determined that Eight Thousand Dollars (\$8,000) is a fair and reasonable Administrative Penalty to assess against Permittee with regard to Administrative Order and Assessment of Penalty #FP-01-15.
 - B. Payment of said Eight Thousand Dollars (\$8,000) shall be made in four (4) equal installments commencing November 15, 2016 and due on the fifteenth day of each consecutive month thereafter. The four (4) installments shall be for Two Thousand Dollars (\$2,000) each. Payments shall be by check made due and payable to "Narragansett Bay Commission - Environmental Enforcement Fund" and mailed, postage prepaid, or delivered to the NBC, attention of Jennifer J. Harrington, Esquire, at One Service Road, Providence, Rhode Island, 02905.

4. **FACILITY REQUIREMENTS**

- A. **INTERNAL TESTING EQUIPMENT:** Permittee shall purchase sampling equipment for in-house analytic testing to be used prior to discharging process wastewater to the NBC's facilities as outlined below to ensure the pretreatment system is operating properly.

- i. Within thirty (30) days of execution of this Consent Order, Permittee shall submit technical information and/or specifications of proposed sampling equipment to the NBC for review and approval.
- ii. Within thirty (30) days of receipt of NBC approval, Permittee shall purchase, install and commence use of said in-house testing equipment. Specifically, Permittee shall test its process wastewater throughout the pretreatment process prior to discharging to the NBC facilities.
- iii. Once Permittee commences use of the in-house testing equipment Permittee shall record on a daily basis all results from said in-house testing in a logbook available for review by NBC personnel.

B. TRAINING SESSIONS: Permittee shall conduct internal staff training once per month for all of its employees involved in its process wastewater and pretreatment operations regarding 1) awareness of the impacts of process wastewater from the facility on the NBC's facilities, 2) pretreatment procedures and practices specific to Permittee's facility and 3) wastewater discharge permit compliance requirements. Permittee shall submit a schedule and plan for ongoing training of its employees. Suggested training topics include, but need not be limited to the following:

- Wastewater Discharge Permit Requirements
- Proper Plating and Dragout Procedures
- Materials Handling Procedures
- Spill Control and Response Procedures
- Log Book Requirements
- Reporting and Submittal Requirements

The date and topic of each training session shall be recorded in a logbook that is available for review by NBC personnel. Permittee shall provide the monthly staff training for a period of one (1) year or satisfaction of the obligations of this Consent Order as determined by the NBC in writing, whichever is later.

5. FORCE MAJEURE:

- A. In the event that there is any dispute as to whether all or a portion of the Permittee's failure to comply with any of the requirements under this Consent Order was caused by circumstances beyond their reasonable control, the Permittee shall have the burden of proof to show:
- (i) that the noncompliance was caused solely by circumstances beyond the Permittee's reasonable control; and
 - (ii) that each continued day of noncompliance that resulted was caused solely by circumstances beyond the Permittee's reasonable control; and

(iii) that the Permittee employed all reasonable mitigating measures to minimize the duration and impact of the noncompliance.

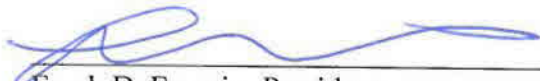
GENERAL PROVISIONS

6. This Consent Order is not a permit and in no way relieves the Permittee of responsibility to comply with any permit or any subsequent amendments thereto that may be issued by the NBC.
7. This Consent Order shall constitute full and final satisfaction for the violations alleged in Administrative Order and Assessment of Penalty #FP-01-05 and discharge any liability of the Permittee to the NBC for all violations and claims arising from the factual allegations contained in Administrative Order and Assessment of Penalty #FP-01-05.
8. The Permittee hereby consent to the issuance of this Consent Order as a final order by the NBC's Executive Director. In so consenting, appropriate officers of Permittee have personally read and understood all of the terms and conditions of this Consent Order.
9. The Permittee hereby waives thee right to a hearing provided by Article 10 of the NBC's Rules and Regulations or judicial proceedings in this matter, other than a proceeding to enforce the terms of this Consent Order.
10. This Consent Order shall not constitute any admission of fact by the Permittee or determination of liability of the Permittee for the violations alleged in Administrative Order and Assessment of Penalty #FP-01-05 or this Consent Order.
11. If Permittee fail to make any payments by the due dates specified under this Consent Order, the entire balance shall become due and payable on the last day of the month following such failure.
12. By this Consent Order, the NBC does not waive any rights or remedies available to it for any violation by the Permittee of Federal or State laws or regulations not contained in the Administrative Order or Assessment of Penalty #FP-01-05 or this Consent Order.
13. Nothing herein shall be construed to limit the authority of the NBC to undertake any action against any person, DFI-EP, LLC and/or Frank DeFruscio in response to conditions which may present imminent and substantial endangerment to the public health, welfare or the environment.
14. The Permittee shall be responsible for all reasonable court costs and attorney's fees incurred by the NBC in collecting any outstanding penalties due under this Consent Order.

15. Any modification of this Consent Order shall be in writing and shall not take effect unless approved in writing by NBC and the Permittee.
16. This Consent Order shall terminate when the Permittee has complied with all the terms and conditions of this Consent Order as set forth herein.

CONSENTED TO:

FOR DFI-EP, LLC:



Frank DeFruscio, President

10/6/16

Date

FOR FRANK DEFRUSCIO:



Frank DeFruscio, President

10/6/16

Date

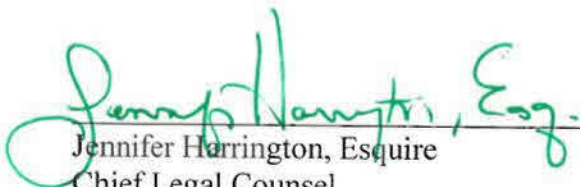
FOR THE NARRAGANSETT BAY COMMISSION:



Raymond Marshall, P.E.
Executive Director
Narragansett Bay Commission
One Service Road
Providence, RI 02905

11/10/16

Date



Jennifer Harrington, Esquire
Chief Legal Counsel
Narragansett Bay Commission
One Service Road
Providence, RI 02905

11/9/16

Date