PRETREATMENT PROGRAM

ANNUAL REPORT

JANUARY 1, 2017 - DECEMBER 31, 2017



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

SECTION #	TITLE
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 10, 2017



MASS MAILING
DRAFT RIPDES - NEW LIMITS
FP and BP BOD and TSS Users
List Attached

:

Dear

The Rhode Island Department of Environmental Management (DEM) recently issued the Narragansett Bay Commission (NBC) new draft Rhode Island Pollutant Discharge Elimination System (RIPDES) permits for both the Field's Point and Bucklin Point Wastewater Treatment Facilities. These permits propose strict discharge limitations for Carbonaceous Biochemical Oxygen Demand (CBOD), eliminating the existing discharge limit of 30 ppm for BOD, and imposing a much lower CBOD limit of 10 ppm.

The NBC does not expect this more stringent limit will improve the water quality of the Providence and Seekonk Rivers, as the two NBC treatment plants typically discharge BOD and CBOD concentrations within this range. However, the significantly stricter CBOD limit proposed by DEM may result in a reduction of the amount of BOD the NBC can receive at our treatment facilities. This much lower limit could potentially impact your business if the NBC has to restrict or reduce the amount of this material we can accept. Should the NBC have to impose local discharge limits for CBOD, local businesses may need to install costly treatment systems to achieve compliance. In addition, the imposition of the stricter limits may potentially eliminate the NBC's ability to accept new sources of BOD loads which may prevent you from expanding your operations.

The NBC asks you to review the draft permits and provide comments to the DEM. In addition, we strongly urge you to contact the Governor's office and your representatives to inform them of the impact these strict limitations may have on your business. The draft permits can be found on the DEM website at the following link:

http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/pdfs/nbcrip16.pdf

The DEM has scheduled a Public Hearing on the two NBC RIPDES permits for January 26, 2017 at 5:00 pm. The Public meeting will be held at the following address:

DEM - Room 300 235 Promenade Street Providence, RI 02908

Written comments on the permits will be accepted until January 31, 2017 at 4:00 pm.

We look forward to your support in this matter. If you have any questions, please contact me at (401) 461-8848, ext. 490.

Sincerely,

Kerry M. Britt

Pretreatment Manager

KMB:smb

January 10, 2017



MASS MAILING
DRAFT RIPDES - NEW LIMITS
State, City, and Town Planners
List Attached

SUBJECT: DEM Issues New RIPDES Permits to Narragansett Bay Commission

Dear «Title1» «LastName»:

The Rhode Island Department of Environmental Management (DEM) recently issued the Narragansett Bay Commission (NBC) new draft Rhode Island Pollutant Discharge Elimination System (RIPDES) permits for both the Field's Point and Bucklin Point Wastewater Treatment Facilities. These permits propose strict discharge limitations for Carbonaceous Biochemical Oxygen Demand (CBOD), eliminating the existing discharge limit of 30 ppm for BOD, and imposing a much lower CBOD limit of 10 ppm.

The NBC does not expect this more stringent limit will improve the water quality of the Providence and Seekonk Rivers, as the two NBC treatment plants typically discharge BOD and CBOD concentrations within this range. However, the significantly stricter CBOD limit proposed by DEM may result in a reduction of the amount of BOD the NBC can receive at our treatment facilities, which may adversely affect economic development in the cities and towns that we serve. This much lower limit may also hurt businesses already discharging to the NBC, since they may need to install costly treatment systems if we should have to develop new local discharge standards. Most importantly to you, the imposition of the stricter limits may potentially eliminate the NBC's ability to accept new sources of BOD loads such as from food processing, manufacturing, breweries and other companies, potentially limiting industrial and commercial growth in your community.

The NBC asks you to review the draft permits and provide comments to the DEM. In addition, we strongly urge you to contact the Governor's office and your representatives to inform them of the impact these strict limitations may have on your community. The draft permits can be found on the DEM website at the following link:

http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/pdfs/nbcrip16.pdf

The DEM has scheduled a Public Hearing on the two NBC RIPDES permit for January 26, 2017 at 5:00 pm. The Public meeting will be held at the following address:

DEM - Room 300 235 Promenade Street Providence, RI 02908

Written comments on the permits will be accepted until January 31, 2017 at 4:00 pm.

We look forward to your support in this matter. If you have any questions, please contact me at (401) 461-8848, ext. 490.

Sincerely,

Kerry M. Britt

Pretreatment Manager

KMB:smb



January 25, 2017

MASS MAILING SECOND LETTER - DRAFT RIPDES NEW LIMITS State, City, Town Planners, and PT Users List Attached

Dear

I recently sent you a letter to make you aware that the DEM had issued new draft RIPDES permits to the NBC and that the present discharge levels for BOD were being significantly lowered. I wanted to take this opportunity to let you know that the DEM has heard our concerns and we are working together cooperatively to hopefully resolve this issue. We are confident that the DEM will work in the best interest of the community and environment to resolve this issue. We still hope that you will consider providing comments to the DEM on this important matter. The DEM has scheduled a Public Hearing on the two NBC RIPDES permits for January 26, 2017 at 5:00 pm. The Public Hearing will be held at the following address:

DEM - Room 300 235 Promenade Street Providence, RI 02908

Written comments on the permits will be accepted until January 31, 2017 at 4:00 pm.

Please do not hesitate to contact me at 461-8848, ext. 490 if you have any questions on this matter.

Sincerely,

Kerry M. Britt

Pretreatment Manager

KMB:smb



March 3, 2017

ENVIRONMENTAL MERIT AWARDS Mass Mailing - All Users - Both Districts List Attached

Dear

The Narragansett Bay Commission (NBC) is proud to announce its twenty-second 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:

https://www.narrabay.com/ProgramsAndProjects/PretreatmentProgram/Environmental%20Merit%20Awards.aspx

Please download the application and return it by March 17, 2017 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

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

Sincerely,

Kerry M. Britt Pretreatment Manager

Jim McCaughey

John Zuba



March 6, 2017

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 2016, 17 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.

Alloy Holdings, LLC

Dominion Energy Manchester Street, Inc.

Electrolizing, Inc.

Godfrey & Wing, Inc.

Induplate, LLC

International Chromium Plating

Interplex Engineered Products, Inc.

Liquid Blue

Mahr Federal, Inc.

Providence Journal Company - Production Facility

Providence Metallizing Company, Inc.

Stackbin Corporation

Tanury Industries PVD, Inc.

Technodic, Inc.

Truex, Inc.

Univar USA, Inc.

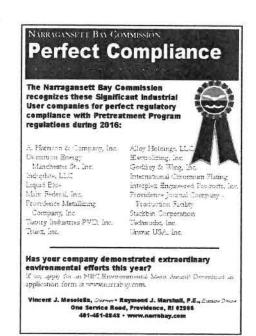
An advertisement recognizing the achievements of these companies was published in the Providence Journal on February 23, 2017. Aligned herewith is a copy of the advertisement for your reference.

Sincerely,

Kerry M. Britt

Pretreatment Manager

KMB:smb





March 8, 2017

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 2016, 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;
- 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 2017. 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,

Kerry M. Britt

Pretreatment Manager

KMB:smb

cc: Pretreatment Engineers/Technicians

March 16, 2017



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, 2017, the names of eleven (11) firms from both districts were published in an advertisement in the Providence Journal due to their SNC status. These firms were billed by the NBC for the reimbursement cost for this public notice. A copy of this public notice is enclosed for your information. 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 2017.

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

Sincerely,

Kerry M. Britt

Pretreatment Manager

KMB:smb

Enclosures

cc: Pretreatment Engineers and Technicians



SIGNIFICANT NON-COMPLIANCE CRITERIA

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

EXPLANATION OF SIGNIFICANT NON-COMPLIANCE (SNC) CRITERIA

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

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

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

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

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

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

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

The TRC limit for copper, 1.44 is exceeded four (4) our 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.

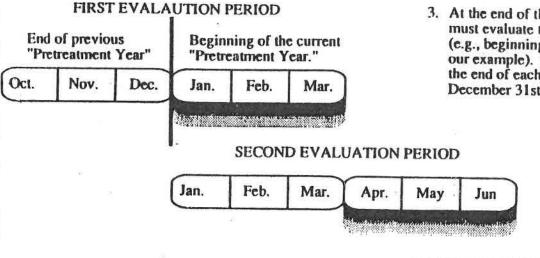
Example: A firm dumps an electroplating tank containing copper and cyanide. These toxic chemicals kill the microorganism at the NBC Wastewater Treatment facility, interfering with NBC operations. The firm is in SNC for Criteria C.

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.

- <u>SNC Criteria D</u> 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.
- <u>SNC Criteria E</u> 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.

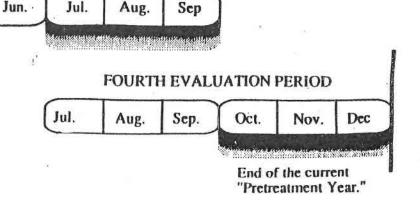


Apr.

May

- 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 D previous "Year."





The Narragansett Bay Commission

PUBLIC NOTICE



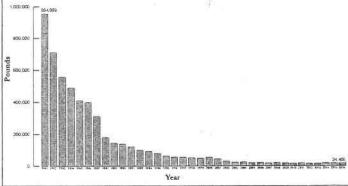
Firms in Significant Non-Compliance

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, 2015 through December 31, 2016. 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 BOL), TSS, fats, oil, and grease and 1.2 for all other pollutants except pFI);
- (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, 1981-2016



HE NARRAGANSETT BAY COMMISSION IS COMMITTED TO PROTECTING THE STATE'S TWO LARGEST WASTEWATER TREATMENT FACILITIES AND NARRAGANSETT BAY FROM TOXIC DIS CHARGES. 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 zine 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 97.4% and 98.7% 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
Putnam Holdings, Inc.	Failure to submit reports on time (6)	Reports have not been received.
Pawtucket		
Ecological Fibers, Inc.	Zn (2)	Firm is now in compliance.
Rand Whitney Southeast Container, LLC	Cu (2)	Firm is now in compliance.
Bliss Manufacturing Company, Inc.	CN (2)	Firm is now in compliance.
Microfibres, Inc.	Failure to submit reports on time (6)	Firm is out of business.

Field's Point Service Area

Company Name	Violations Cited	Present Status
Eastern Screw Company	O&G (2)	Firm is now in compliance.
KB Surfaces	Failure to submit report on time (6)	Report has been received.
North Providence	e	
DFI-EP, LLC	Cr (2), CN (2), Ni (2)	Firm is now in compliance.
Providence Providence Specialty Products	O&G (1. 2)	Firm is now in compliance.
Providence Specialty Products	O&G (1, 2)	Firm is now in compliance.
	Failure to submit report on time (6)	Report has been received.
JC Gorham Co.	Failure to submit report on time (6)	Reports have not been received.
Bella's Jewelry	Failure to submit report on time (6)	Report has not 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

Narraganset: 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 * Instagram: @narrabay

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



June 6, 2017

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

Dear «TITLE» «LASTNAME»:

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

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 97.4% reduction in heavy metal discharges to the Field's Point Facility since 1981. The cyanide loadings to this treatment facility were also reduced by 98.6% 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

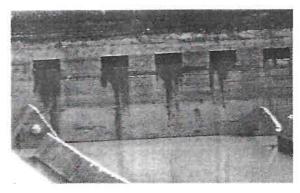
October 11, 2017

«Title» «FirstName» «LastName» «Company» «Address1» «City», «State» «PostalCode»



Dear «Title» «LastName»:

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/Technician



October 11, 2017

«MrMs» «First_Name» «Last_Name» «Company» «Street» «City», «State» «Zip_Code»

Dear «MrMs» «Last Name»:

The Rhode Island Department of Environmental Management (DEM) has issued new RIPDES permit to the two Narragansett Bay Commission (NBC) Wastewater Treatment Facilities. These new permits impose stringent seasonal Total Nitrogen discharge limits of 5.0 mg/L. Treatment processes at both plants have been upgraded to include Biological Nutrient Removal (BNR) processes. The DEM has required the NBC to develop and implement local limits for nitrogen compounds to ensure the BNR process operates properly and the discharge limits are met. In order to develop the local limits the NBC has been conducting extensive monitoring throughout the two districts. This monitoring includes sampling industrial facilities and sewer lines for nitrogen compounds. Based on this monitoring is has been determined that your facility may have the potential to impact the NBC facilities. Although the local limits have yet to be calculated, it is recommended that you begin to investigate sources of nitrogen at your facility and ways to eliminate or minimize nitrogen discharges. You may want to investigate the following:

- Nitrogen bearing chemicals such as nitric acid and ammonia are often used in process operations and pretreatment systems. If any nitrogen bearing chemicals are used at your facility, you should investigate chemical substitution as a viable option.
- · Recycle waste streams where possible.
- Pretreatment systems.

Enclosed please find a spreadsheet of the nitrogen results from samples collected at your facility for your reference.

Please note the NBC is available to provide free technical assistance to you. For information on how the Pollution Prevention Program can assist you, please contact James McCaughey at 401.461.8848 ext. 352.

If you have any questions please contact me at 401.461.8848 ext. 490.

Sincerely,

Kerry M. Britt

Pretreatment Manager

Enclosure

CC: James McCaughey, PE

«Engineer»



November 30, 2017

MASS MAILING HOLIDAY SHUTDOWN LETTER ALL IU AND SIU (Categories 11 thru 59)

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,

Kerry M. Britt

Pretreatment Manager

KMB:sm

Enclosure

cc: Pretreatment Engineers and Technicians

Narragansett Bay Commission



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

Vacation Shutdown Prohibited Sewer Discharges

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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. Mesolella, Chairman

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

NEWSPAPER AND MAGAZINE ARTICLES



Political Scene: R.I. landfill agency is pushing back on budget 'scoop'

By Jennifer Bogdan JenniferBogdan

By Patrick Anderson Journal Staff Writer patrickanderso_

Posted Jan 29, 2017 at 6:08 PM Updated Jan 29, 2017 at 6:08 PM

Gov. Gina Raimondo has proposed \$14.1 million in "scoops" from seven quasi-state agencies — including \$6 million from the Rhode Island Resource Recovery Corporation — to cover other state needs, but landfill officials say that would end up costing R.I. residents in the long run.

Raiding the coffers of quasi-state agencies to finance other budget priorities is so customary in Rhode Island the practice has its own funny name: scoops.

This year Gov. **Gina Raimondo** has proposed \$14.1 million in "scoops" from seven quasi-state agencies in her 2017-2018 budget proposal.

The size and timing of at least one of this year's proposed transfers — \$6 million from the Rhode Island Resource Recovery Corporation — is bound to raise some eyebrows.

Rhode Island Resource Recovery runs the Central Landfill and starting July 1 is slated to raise the "tipping" fees municipalities pay to have their garbage dumped there for the first time since 1992.

The fee hike, 47 percent over the next two years, is expected to raise \$2.2 million that Central Landfill officials say they need to help finance a \$120-million expansion.

Resource Recovery has built up a \$20-million cash surplus, which is likely what made it attractive to scoop, but Executive Director **Michael OConnell** said that healthy balance should stay where it is.

"Looking at our current financial position is not the way to look at it; you have to look at where we are going to be," OConnell said. "We will be spending more capital money in the future than we do normally."

In the letter to state lawmakers introducing her budget, Raimondo includes getting rid of the "scoops" on her wish list if state revenues come in better than expected this spring.

Brenna McCabe, spokeswoman for the Department of Administration, provided this rationale for the transfer:

"As part of the annual budget process, the [Office of Management and Budget] typically examines the balances of quasi-public agencies and other funds within the State to determine if a transfer of funds can be proposed to support the State budget. During this process, the Office also takes into consideration various factors, including but not limited to availability of unrestricted balances and budget priorities."

OConnell said he plans to make the case to lawmakers at upcoming budget hearings that Resource Recovery cash should not be touched.

It proved a winning argument during the last two budget cycles, which saw the Assembly remove \$1.5 million in proposed "scoops."

If lawmakers do tap the dump for revenue, OConnell said it could either make further fee hikes more likely or force the landfill to seek more commercial business, which would exacerbate the space shortage driving the 100-acre expansion.

The next two largest proposed scoops are from the Rhode Island Turnpike and Bridge Authority (\$2.6 million) and the Narragansett Bay Commission (\$2.5 million).

The Narragansett Bay Commission, which treats much of the state's wastewater, is also accustomed to warding off proposed budget transfers and completing massive capital projects.

The Commission is planning for the third phase of its Combined Sewer Overflow project, anticipated to cost \$815 million.

Commission spokeswoman **Jamie Samons** argued this week that raiding the commission's budget penalizes its ratepayers for the benefit of residents in other areas of the state.

No call to Bernie

When New York Gov. **Andrew Cuomo** launched a free-tuition proposal in his annual budget, he turned to Vermont Sen. **Bernie Sanders**, the recent Democratic presidential candidate and leading proponent of free college, to help make his pitch.

At the plan's unveiling event in New York City, Sanders called Cuomo's plan "revolutionary," according

to The New York Times.

While he lost the Democratic nomination to **Hillary Clinton**, Sanders won the Rhode Island presidential primary by 11 percentage points and drew an impressive crowd to an April rally at Roger Williams Park.

So did Raimondo consider reaching out to Sanders to help drum up support for her free-college plan?

"I didn't do that, although I guess the more support the better," Raimondo said. "But to me this isn't a political stunt."

Of course, Raimondo's plan to provide two years of free tuition to Rhode Islanders at public colleges already has support from the General Assembly's more Sanders-friendly liberal members. The more conservative Democrats that Raimondo needs to convince to pass the plan might not "feel the Bern."

Raimondo supported Clinton in the primary.

Taking a pass on health insurance

In addition to a \$15,429-a-year salary and special legislative license plates bearing their district number, Rhode Island's part-time lawmakers count state health insurance among the perks of the office.

Some take advantage of it; some don't.

Many General Assembly members get health insurance through their day jobs or other means and decline the state coverage, which is provided with no copays through United Healthcare.

Of the 16 new lawmakers sworn in this month, half waved health insurance, according to figures from the Joint Committee on Legislative Services.

They are: Representatives Julie Casimiro, D-North Kingstown; Susan Donovan, D-Bristol; Kenneth Mendonca, R-Portsmouth; Ramon Perez, D-Providence; Evan Shanley, D-Warwick; Camille Vella-Wilkinson, D-Warwick; and Senators Ana Quezada, D-Providence, and James Seveney, D-Portsmouth.

Overall, 70 of the 113 General Assembly members take advantage of the state health insurance, or 62 percent. (That's 48 of 75 representatives and 22 of 38 senators.)

New license plate requests were still being processed when Political Scene inquired about which current lawmakers have them.

Political Scene: R.I. landfill agency is pushing back on budget 'scoop'

Page 4 of 5

Amazon negotiations

Just before Raimondo introduced her budget this month, the state got word that online retail giant

Amazon would begin collecting sales tax as of Feb. 1.

Was the governor involved in active negotiations with Amazon as the budget unveil neared?

Not personally, but her administration played a role, she said last week.

Director of Revenue Robert Hull was in talks with Amazon, and the agreement was finalized the week

before the budget was announced, she said.

"We weren't counting on it, but I was aware of it and hopeful it was going to happen," the governor

said when asked how the revenue factored into the budget picture.

In all, the state is planning on collecting an additional \$35 million in sales tax next year from all online

retailers combined.

Raimondo noted that the crackdown on collecting the tax will help the state even more significantly in

future years, as online shopping grows in popularity.

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Smith Hill Scorecard

Recreational marijuana legalization: No action

Panhandling: Rep. Charlene Lima, D-Cranston, introduced a bill prohibiting anyone in an automobile

from stopping "on any public highway to give any person any item." Violations would carry a \$75 fine.

Rep. Robert Nardolillo, R-Coventry, introduced a bill prohibiting standing in designated highways and

median strips unless crossing them or rushing to an accident. Violations would carry a \$100 fine.

Car tax: Rep. William O'Brien, D-North Providence, introduced a bill raising the motor vehicle excise tax exemption from \$500 to \$6,000

Criminal justice reform package: Six bill Senate package introduced by Sen. Michael McCaffrey, D-Warwick, is scheduled for a vote in the Senate Judiciary Committee Tuesday.

Minimum wage: Sen. Leonidas Raptakis, D-Coventry, introduced a bill that would raise the state minimum wage from \$9.60 to \$10 an hour on Jan. 1, 2018. Rep. David Bennett, D-Warwick, the previous week introduced a bill that would raise the state minimum wage to \$10.50 an hour in 2018, the same as Governor Raimondo's budget proposal.

Free college tuition: Raimondo held a rally at Johnston High School Monday in support of her plan for two years of free tuition at public colleges.



MOST POPULAR STORIES

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Citizens campus construction in Johnston on schedule

By Kate Bramson Journal Staff Writer journalkate

Posted Feb 2, 2017 at 1:07 PM Updated Feb 2, 2017 at 10:02 PM

Citizens Financial Group Chairman and CEO Bruce Van Saun took Gov. Gina Raimondo, Mayor Joseph Polisena and others on a tour Thursday of the bank's new corporate campus that's under construction. Van Saun and other bank executives talked of how smoothly work has progressed in the year since Citizens selected a site off Greenville Avenue in northern Johnston.

JOHNSTON, R.I. — Citizens Financial Group Chairman and CEO Bruce Van Saun took Gov. Gina Raimondo, Mayor Joseph Polisena and others on a tour Thursday of the bank's new corporate campus that's under construction.

Van Saun and other bank executives talked of how smoothly work has progressed in the year since Citizens selected a site off Greenville Avenue in northern Johnston.

The project has an estimated cost of \$250 million to \$300 million, and is expected to be completed by mid-2018, Van Saun said.

In a presentation to government and union leaders and Citizens employees at the site, Citizens Bank's head of property Michael Knipper said the site has been "probably the most complicated site" to build a building.

It has required removing an existing landfill and blasting bedrock, which has so far required large quantities of explosives to prepare the land for construction. In all, crews will remove 550,000 cubic yards of material such as boulders and ledge. In comparison, when Gillette Stadium was built in Foxboro, Citizens executives told visitors that project required removal of 90,000 cubic yards of blasted bedrock and 310,000 cubic yards of total excavated materials.

Citizens chose the Johnston site after what Van Saun said last year was an "exhaustive search" for a location to consolidate about 3,200 bank employees from other Rhode Island facilities. Asked after the presentation why the company chose such a complicated site, Van Saun said there was a tradeoff, and that the bank opted to locate there because of the town's commitment to swiftly work on permitting and zoning, which has all moved smoothly.

"We can deal with the complexity," he said of the site preparation. "It's not rocket science."

Citizens has not received any of the tax credits and economic incentives created by the Raimondo administration, such as Rebuild R.I. or Qualified Jobs tax credits.

However, the state and town have helped in other ways:

- —Johnston has granted the project a tax-stabilization agreement, which has set taxes at \$250,000 each year for 20 years, for a total of \$5 million.
- —Citizens and the R.I. Department of Transportation are equally splitting the \$6-million cost to build a new exit and entrance ramp onto Route 295, work that's expected to start in March and be completed by year's end.
- —The Narragansett Bay Commission is extending its sewer line along Greenville Avenue, which will allow residents to connect to sewer and water as well. In all, the new connections are expected to bring in \$400,000 in annual revenue from Citizens and Johnston residents to the commission, Chairman Vincent J. Mesolella said on the tour.

The 123-acre site will include a host of sporting facilities that will be open to the public, including a baseball field where local Little League teams will play, a soccer field, a beach volleyball court, two basketball courts, a tennis court and two bocce courts, Knipper said.



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MOST POPULAR STORIES



February 22, 2018

WEATHER FORECAST (HTTP://FORECAST.WEATHER.GOV/MAPCLICK.PHP? CITYNAME=WARWICK&STATE=RI&SITE=BOX&TEXTFIE

Q

ADVANCED SEARCH (/SEARCH.HTML)

Big dig ready to start

Work to replace water lines, install new 7,000-foot sewer pipe outlined



(/uploads/original/1489078407_a0e2.jpg)

COLOR-CODED: This map outlines the difficulty of the proposed sewer expansion project. Areas highlighted in red are considered problematic and will require digging down up to 25 feet below the surface.

PHOTO COURTESY OF NARRAGANSETT BAY COMMISSION





Posted Thursday, March 9, 2017 1:46 pm

By Tim Forsberg

With the Citizens Bank campus construction project moving on schedule, work to extend sewer and water lines to the site will soon begin, and on March 2 the Narragansett Bay Commission (NBC) held a public forum to provide project details and address residents' concerns.



(http://warwickonline.ads.communityq.com/oaparams=2__bannerid=437__zoneid=19_3Anews%40rhodybeat.com%3Fsubject%3DSunRise%2520News%2520Tip)



(http://www.rijobs.com)



TRENDING STORIES

2 DAYS AGO

When thoughts and prayers aren't enough (/stories/when-thoughts-and-prayers-arent-enough,131830)

"This project is going to move forward, and what we're trying to do this evening is explain to you that there will be disruptions, and you will be annoyed at times, but we promise you that, at the end of the day, you're going to find a better situation after we're complete than as it exists today," said Vin Mesolella, chair of the Narragansett Bay Commission.

With about 150 attending the presentation at the Johnston High School auditorium, Mesolella sought to dispel some rumors, informing the audience that there will be no condemnations of property along Greenville Avenue or any demolition or taking of residents' homes.

Mesolella stated that the Greenville Avenue sewer and water extension is an NBC infrastructure improvement initiative, not a Citizens Bank initiative, and that the commission is taking full responsibility for the project.

"This project was on the drawing board since 2010, and the fact that Citizens Bank is coming here to the town of Johnston has afforded us the opportunity to make this dramatic improvement to our infrastructure and expand our service area," said Mesolella. "Basically, the cost of this is going to be amortized through user fees paid by Citizens Bank."

The contract for both water and sewer work was awarded with a budget of \$8,570,875, with the NBC portion of that being approximately \$7.4 million. Development of extension requires the installation of 7,000 linear feet of new sewer lines from Salina Avenue to approximately 1,000 feet west of I-295. The plan also calls for the construction of a one million gallon water storage tank at the Citizens site to service the area, upgrades to the Greenville Avenue water booster station, and new service laterals to property lines along the project. No disruption of water service is planned during construction.

"This project is a very difficult project; it's the perfect storm for difficult utility projects. We have a deep dig, in some places as much as 26 feet I believe, it's a narrow road, there's a lot of rock and boulders," said Mesolella. "This creates a complexity that we deal with in our industry all the time, in this particular case it's extremely difficult."

Brandon Blanchard, managing engineer with the Pare Corporation, explained in detail the complexities of the project and the challenges presented due to their truncated timeline for completion, set for spring of next year.

Water system upgrades include the replacement of an existing eight inch asbestos cement water pipe with a with 16 inch ductile iron pipe. According to Blanchette, the new water tank and pump station upgrades will significantly improve pressure, fire flow, and system reliability to the area. He highlighted the benefits of sewer service being brought to an area reliant on onsite septic systems, with construction of new sewer completed with no sewer assessment to be paid by residents and businesses. Should residents wish to hook up, they would be responsible for installation on their property.

To address the project's challenges and accelerated schedule, and to minimize construction duration to limit disruptions, extended construction hours have been approved. Work hours are scheduled from 7 a.m. to 10 p.m. Monday through Saturday, with no blasting or mechanical rock removal to occur after 5 p.m.

Mazzulla takes charge as freshman point guard at George Washington (/stories/mazzullatakes-charge-as-freshman-pointguard-at-georgewashington,131776)

THURSDAY, FEBRUARY 15

FIFTY SHADES FREED (/stories/fifty-shades-freed,131681)

FRIDAY, FEBRUARY 16

Accept people as they are (/stories/accept-people-as-theyare,131684)

FRIDAY, FEBRUARY 16

15:17 TO PARIS (/stories/1517-toparis,131680)

FRIDAY, FEBRUARY 16

PETER RABBIT (/stories/peterrabbit,131683)

FRIDAY, FEBRUARY 16

Citizens gives corporate campus tour to thousands (/stories/citizens-gives-corporatecampus-tour-tothousands,131793)

THURSDAY, FEBRUARY 15

JPD Game Dinner steps up to the plate (/stories/jpd-game-dinnersteps-up-to-the-plate,131786)

THURSDAY, FEBRUARY 15

CALENDAR MORE (/CALENDAR/)

Tomorrow | URI vs. **Dayton Men's Basketball** at the Ryan Center, Ryan Center, 1 Lincoln Almond Plaza, Kingston, RI (/stories/uri-vsdayton-mens-basketballat-the-ryancenter, 130816)

Every Saturday, starting June 13, **2015 - June 1, 2018** | Lydia's Closet Thrift Shop, Edgewood Congregational Church, 1788 Broad Street, Cranston, RI (/stories/lydias-closet-thriftshop, 103110)

Sunday | New Date- 14th Annual Polar Plunge benefiting A Wish Come True, Easton's Beach (1st Beach), 175 Memorial Blvd., Newport, RI (/stories/new-date-14th-annual-polarplunge-benefiting-a-wish-cometrue, 131281)

During construction, Greenville Avenue will only be open to local residents on Greenville Avenue and side streets, schools buses, emergency vehicles, mail carriers, along with trash and recycling collection. Access to residents' driveways will be maintained and kept open.

Bedrock and large boulders are expected in some parts of project based on subsurface surveys. Two sections of the project require deep sewer installation between 20 to 25 feet in an area east of Atwood Avenue and east of Route 295 near Smokey Drive. These sections represent about a third of the project.

The work sequence will first begin in several weeks in the vicinity of 295 and work west towards the Citizens site. Once that work is complete, crews will be moved to the easternmost part of the project starting at Salina and work west. National Grid will also be replacing the gas main from Salina Avenue to Blackberry Knoll only.

At those streets that intersect with Greenville Avenue but do not currently have sewer lines, stubs will be installed several feet into those side streets for future projects and developments. When the project is complete, the road will be restored and repaved, with drainage concerns taken into consideration. Construction of sidewalks is not part of current plans.

While work is underway, full time observation staff will be on hand, with representative from NBC, Providence Water, Pare Corporation and DiGregorio present. Police details will be used in addition to traffic controls, including electronic message boards that will provide updates. A 24-hour hotline, operated by NBC personnel, will be available for resident questions and concerns.

"Greenville Avenue is a state road, and during the construction of the sewer and water project we will make sure that it is open to local traffic so you'll be able to come and go from your home as you please, as well as having 24 hour a day, seven days a week access to police, fire, rescue and school buses," said Mayor Joseph Polisena.

Homeowners on Greenville Avenue will also soon be approached by NBC staff, who will be going door to door to find out where homeowners would like their lateral connections on their property.

"There will be no doubt it will be a bit of an inconvenience, absolutely, but when the project is complete there will be some major benefits to the Greenville Avenue area and the surrounding neighborhoods," said Polisena.



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3/28/2017

Earth Day cleanup planned for April 22

PAWTUCKET – The Neighborhood Alliance of Pawtucket will hold its annual Earth Day cleanup on Saturday, April 22, from 9 a.m. to 1 p.m.

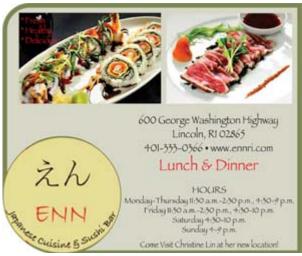
Headquarters will be at Galego Court, 483 Weeden St., where refreshments and entertainment will be offered at 1 p.m.

Cleanups of the city's three rivers will be directed by local watershed councils, including a canoe cleanup of the Blackstone River near Tolman High School.

Neighborhood Alliance of Pawtucket President Arthur Plitt said he's hoping to have more than 500 people participate in the needed cleanup this year, from young people to older adults.

The city of Pawtucket, Pawtucket Housing Authority, Narragansett Bay Commission and the Navigant Credit Union are all cosponsors of the event.

Those who can't donate time but have extra flowers to give away are encouraged to bring perennials, hostas, day lilies, and cone flowers to headquarters anytime between 8 a.m. and 4 p.m. Monday through Thursday of that week.



Register to volunteer by emailing kingarthur@gmail.com.



R.I. sewage plants threatened by rising tide of climate change

By Alex Kuffner
Journal Staff Writer
kuffneralex

Posted Mar 31, 2017 at 11:38 PM Updated Mar 31, 2017 at 11:43 PM

Of the state's 19 major treatment plants, seven would be predominantly flooded in the event of a 100-year storm — one that has a 1 percent chance of occurring in any year — according to the report from the R.I. Department of Environmental Management and the Executive Climate Change Coordinating Council. Another eight would be partially flooded.

PROVIDENCE, R.I. — Because wastewater treatment plants were almost always built on low-lying land near rivers, bays or oceans, they are, as a rule, vulnerable to flooding.

While plant managers in Rhode Island have long known the risks posed by a heavy rainfall or a storm-driven surge, a new study released by the state predicts that the extent of inundation will only increase in coming years because of climate change.

Of the state's 19 major treatment plants, seven would be predominantly flooded in the event of a 100-year storm — one that has a 1 percent chance of occurring in any year — according to the report from the R.I. Department of Environmental Management and the Executive Climate Change Coordinating Council. Another eight would be partially flooded.

Although that level of vulnerability may be surprising to the average Rhode Islander, it's not necessarily news to the operators of the plants who have had to mitigate the risks that come with managing facilities that must be close to water bodies that they can discharge into.

But the report, which was released on the seventh anniversary of the historic floods of 2010, goes a step beyond simply assessing current conditions by also taking into account the effects of rising seas and more severe rain events that scientists predict as the climate changes.

For many plants on the coast, if up to 5 feet of sea-level rise is factored in, a storm surge would breach current protection measures and potentially reach vital equipment. Inland facilities would face a similar scenario if floodwaters reach 2 or 3 feet higher than current planning levels in the event of a bad rainstorm.

Bill Patenaude, who directed the study for the DEM, said that as far back as the 1990s officials at the agency started noticing a higher frequency of heavier downpours that were overtaxing treatment plants.

"Of course, climate change was the answer," Patenaude, principal engineer in the Office of Water Resources, said on

Friday. "That was what we were seeing."

The worst fears were confirmed seven years ago to the day when the Pawcatuck and Pawtuxet rivers overflowed their banks during a string of rainstorms. The treatment plants in West Warwick and Warwick experienced severe flooding while those in Cranston and Westerly were also damaged.

It was in the wake of those floods that the DEM and the city, town and quasi-public agencies that run the treatment plants started contemplating how to make them more resilient.

The new \$222,900 report, which was largely funded through a federal grant and prepared by the engineering firm Woodard & Curran, not only assesses vulnerabilities but also recommends improvements. Most would step up existing protections and are relatively inexpensive. Of the approximately 275 recommendations spread across the 19 plants, about 150 would cost less than \$50,000 and another 100 would be no more than \$250,000.

Solutions could be even cheaper. During a presentation to operators of the Fields Point Wastewater Treatment Facility in Providence, Patenaude displayed a photo taken during the 2010 floods of the Cranston treatment plant surrounded by floodwaters.

He pointed to a small wall built a few years before the flood to prevent water from entering an access hatch to a tunnel full of expensive equipment.

"It's a small city down there and if water had gotten in there, it would have been a disaster," Patenaude said. "Tens of thousands of dollars protected millions of dollars."

But only so much can be done to protect plants that by and large were built on floodplains. When Patenaude described a recent microburst that dumped 8 inches of rain on New York in a matter of hours, Greg Dacruz, maintenance supervisor at the Fields Point plant, interjected.

"How do you plan for that? If you get that much rain in that short a period of time?" he said. "You can't."

Preliminary findings in the report were shared with the treatment plants last fall and the facilities in Smithfield and Warwick are already incorporating some of the recommendations. The Newport plant is also moving forward with improvements and the risks to the Narragansett plant were downgraded because a new berm is going up around it.

The Fields Point plant is also ready to incorporate some of the mitigation strategies, said Jamie Samons, public affairs manager for the Narragansett Bay Commission, which manages the facility.

"This is the last line of defense for point-source pollution in Narragansett Bay," she said. "Planning for the future is very important."

Treatment plants that would be predominantly inundated during a 100-year storm

- * Bucklin Point in East Providence
- * East Greenwich
- * East Providence

R.I. sewage plants threatened by rising tide of climate change - News - providencejournal.... Page 3 of 4



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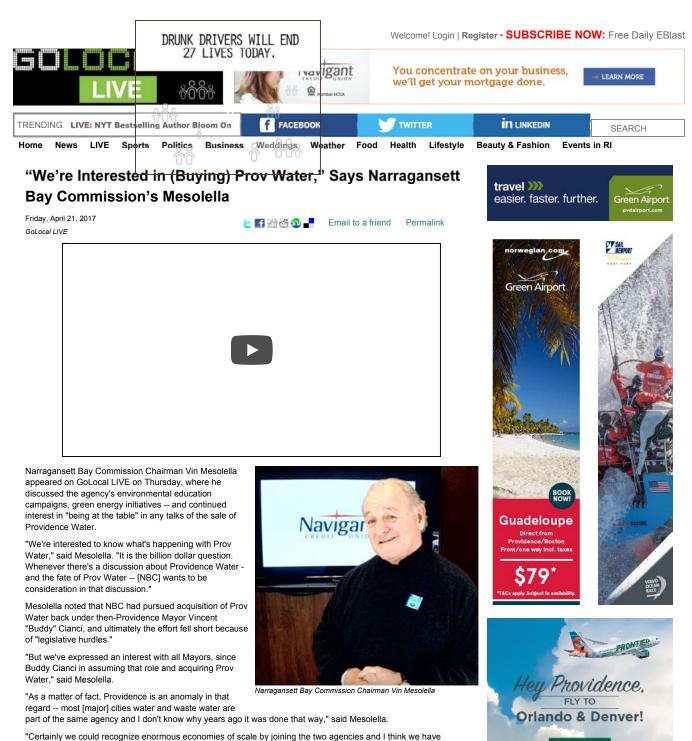
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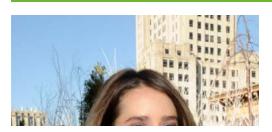
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Molly O'Brien: 17 to Watch in 2017 in RI

O'Brien, who may be Rhode Island's mostliked 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,

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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 possible. She's one of the hardest-working, best-liked media personalities in the market. And 2017 could be her biggest year yet.



















































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5/10/2017

Greenville Ave. construction could be done early

By JACKIE ROMAN, Valley Breeze & Observer Staff Writer

JOHNSTON – Local motorists continue to hit roadblocks as construction of a new corporate headquarters for Citizens Bank off Greenville Avenue moves ahead.

The Narragansett Bay Commission is installing 7,000 feet of new sewer pipe from Salina Avenue to about 1,000 feet west of I-295 in Johnston, a significant undertaking that requires construction Monday through Saturday from 7 a.m. to 5 p.m. The crew has permission to work until 10 p.m. but has not had to do so since construction first began in early April. The entire project is scheduled to run through November, but an accelerated schedule means it could be done sooner.

Jamie Samons, public affairs manager for Narragansett Bay Commission, said the agency had been looking for opportunities to expand its rate base when Citizens Bank decided to build its corporate campus off Greenville Avenue in Johnston. The campus is expected to house more than 3,000 employees and cover 420,000 square feet.

"In essence, that guaranteed revenue allowed us to do this work now," said Samons.



Samons said the project will not only benefit the Citizens Bank corporate campus but also help the community.

"It is for a real improvement to the infrastructure," she said.

In addition to a newly paved road, residents in the area may notice improved water pressure and reliability in service.

But Samons acknowledges that the long-term benefits don't make the headache of detours and drill hammers any easier.

"The truth of the matter is, construction is inconvenient," she said. "It's on the forefront of our minds too."

Though the project is a hot topic of conversation in the community, residents are not voicing complaints with the authorities.

Smithfield Police Capt. Michael Rheaume said the station has not received any calls related to the Greenville Avenue construction.

"We haven't had any issues where traffic has been backed up as a result," he said.

Providence Water and the Rhode Island Department of Transportation are also involved in construction along the route.

RIDOT will be assisting with the construction of Greenville Avenue on and off ramps from Route 295. Charles St. Martin, chief public affairs officer for the state agency, said the new ramp will be similar in construction to the one currently servicing Exit 5 on Route 295, toward Rhode Island Resource Recovery Industrial Park.

RIDOT will be providing \$3 million in funding for construction of the ramp and the developer will be matching that amount. The town will be overseeing construction and design of the structure.

Construction of a new highway ramp should get started this summer and take about a year or two, said St. Martin.

According to Providence Water spokeswoman Dyana Koelsch, the company will be replacing an eight-inch main on Greenville Avenue with a 16-inch main. For homes using wells along the main replacement area, there will be an opportunity to tie into the new main service.

"Not only is Providence Water working closely with Narragansett Bay Commission and Citizens Bank to put in the proper infrastructure and distribution system to support Citizens' new complex, we are also mindful of planning for the future and the potential for future growth," Koelsch said.

Part of the long-term planning involves the installation of a one million gallon water storage tank, instead of a tank half that size just to service the needs of Citizens Bank. Providence Water will also be increasing the pumping capacity of its Greenville Avenue pumping station, from 1,000 gallons per minute to 2,400 gallons per minute.

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http://www.ricentral.com/arts_entertainment/on-public-access-and-how-to-lose-it/article_77554a62-372f-11e7-bf11-47c9d3f179e6.html

On public access and how to lose it

By TODD CORAYER May 13, 2017



Kayaks filled the town beach in Wickford during the Ocean State Kayak Fishing Expo last weekend. Photos By Miles Corayer

Narragansett Bay is teeming with stripers. It's easy to access them from beaches, breakwalls and kayaks, from river mouths to the upper Bay and the Taunton River. Our CRMC provides a wonderful, interactive map of public access spots, which you can find at www.crmc.ri.gov/publicaccess.html.

In shallow waters, there's topwater action with D.O.A. jerkbaits rigged with a white popper up forward. Pearl is a key color especially under cloudy skies, of which we've had plenty. That fast, tip jerking action with lots of splashes calls in bass quite quickly. For deeper waters, those classic Cocahoe Minnows and Zoom Flukes are always reliable. Warming waters mean quicker retrieves.

Low key GSO scientist, master brewer and good friend Dennis and family motored south from the free-for-now public access ramp at South Kingstown's Marina Park, looking for worms hatching. With two and a half horses pushing them with and against tides, chilly waters iced their chances of landing a striper so discoveries of new coves and corners to fish again filled the day. Cold rains seem to have slowed the hatch all around, save for a one day event in Wickford. You can access that cove via a public launch area at the end of Main Street, just north of the town dock.

May's the time for those fickle red worms to release themselves from warm mud to wiggle their mating ritual on the surface, drawing in scores of stripers which brave shallow waters to access such a smorgasbord of protein. Kayakers and SUP fishermen looking for the hatch have access to Potter Pond at the end of Lake Avenue, Park Avenue and Washington St. in Matunuck. There's enough access for a few cars at each and the town does a steady job of keeping the ROW signs maintained and each access cleared of vegetation.

RIDEM has begun clearing land on South Kingstown's Worden Pond Road for additional parking, which means more access to the popular freshwater pond stocked with Northern pike and favored by bass anglers, swimmers and day sailors. Sportsmen of all tribes rely on such easy access.

Sunday's successful Ocean State Kayak Fishing Expo in Wickford was made possible by public access to the beach and Narragansett Bay. Paddlers and fishermen ignored weather forecasts of rain, wind and the general malaise accompanying April showers lingering through May to access free demos of kayaks from Old Town, Eddyline and Feelfree.

Ronnie Lippe landed a personal best common carp this week at 31 pounds. Ronnie's tight-lipped about spots but he knows how to find public access to often very common waters, where carp lie. A primary rule of carp fishing is treating them carefully, returning them quickly. Carp fishermen respect their catches, like they do the access which affords them opportunities to land such spectacular animals.

With the help of the Pawtucket Parks Department and the Narragansett Bay Commission, Bonnie Combs of the Blackstone Heritage Corridor, Inc. has once again improved public access for fishermen. This time she installed two monofilament recycling stations at Festival Pier. Old mono will be safely recycled at this very popular access to a Providence River teeming with fish. Well done again, Bonnie.

The Buckeye Brook Coalition is looking for water quality monitors to access waterways and collect samples. Working with URI, they hope to better understand, "the source and path of excess nutrients that lead to algal blooms and other water quality issues." They need volunteers for every other Saturday with training provided by URI's Watershed Watch. You can access Bill Aldrich at 401.785.1596 or at atwpaldrich@cox.net.

Schoolie bass continue to access Jerusalem's west wall, looking for food. Your best access is through the state parking lot in East Matunuck. It's a fine beach walk; we fishermen, collectors of shells, daydreamers, swimmers and surfers love to walk beaches. But not on one stretch of Misquamicut.

The RI Supreme Court has upheld a lower court decision which renders more than two miles of beach, roughly from the Westerly Town Beach to the Weekapaug Breachway, off limits to all except a handful of landowners. Justice Indeglia's opinion

reads, in part, "Accordingly, while there may be some evidence to the contrary, we agree that the extrinsic evidence does not reveal the Plattors' manifest intent to dedicate the beach area to the public. There was no error."

What kind of persons go to such expensive and embarrassing extremes to prevent people from walking a beach? What tragedies befell and festered in these litigants to spawn such persistent vitriol for bathers, walkers and fishermen? Fighting logical opposition from environmental groups, state agencies, local governments and their own neighbors, they have proved their point that only they shall sit on the warm sands of Pleasant View to celebrate summer with champagne and pule cheese. And oh that pule, if only I could only think of it's other name.

Our Supreme Court allows us access to the defendants names because public access, be it to public records or to the sea, is critical to our freedom. They are: Joan M. Barbuto; Lynne D. Kaesmann; Clarence G. Brown; Judith W. Brown; John B. Stellitano, Trustee of the John Bruno Stellitano Living Trust; James M. Tobin; Joshua M. Vocatura; Hattie G. Vocatura Trust; Nicholas P. Jarem; Sandra L. Jarem; Mickmays, LLC; Joan A. Carr; and John C. Maffe, Jr. The defendant intervenors are: Dunes Park, Inc.; Donna Pirie; Margaret Andreo; Jane L. Taylor; David K. McGill; Miriam B. McGill; Timothy F. Shay; Brian P. Shay; Justin T. Shay; and Jeffrey A. Fiebelman, Trustee of the 627 Realty Trust.

Todd Corayer is a lifelong fisherman and Advisory Board member of the Mid-Atlantic Fishery Management Council, who lives near Rhode Island's Saugatucket River with his wife, who supports his fishing mainly to get him out of the house and a young son who consistently catches more stripers than him.

tcorayer





Bill would fine utility companies for not keeping roads 'smooth and bump free'



By Kim Kalunian (http://wpri.com/author/kim-kalunian/)

Published: May 17, 2017, 6:38 pm | Updated: May 17, 2017, 6:39 pm



PROVIDENCE, R.I. (WPRI) – For seven months, House Minority Leader Patricia Morgan's drive home was a nightmare.

"Seven months of a really bad road. Seven months of car repairs. Seven months of damage," she said, recalling the bumps and uneven pavement on Wakefield Street in West Warwick.

Morgan said neighbors called to tell her their cars were suffering; she said the culprit was a months-long utility project.

Morgan said state law gives utility companies a 90-day window to permanently restore roads following the completion of their projects. She said she understands they need to allow the ground to settle before they can completely repave, but she also thinks the temporary patchwork can be better executed.

"There's no reason the utility company can't take a little bit of extra care when they're putting the temporary patch in to make it smooth," she said.

Now Morgan has introduced a bill she argues could address the problem.

The legislation says (http://webserver.rilin.state.ri.us/BillText/BillText17/HouseText17/H6204.pdf) "restoration of any altered roadway shall commence immediately after the completion" and should include ongoing work, if necessary, to "keep the roadway smooth and bump free until the permanent restoration can be completed."

Failure to comply would result in a fine of \$500 a day.

Local mayors from both parties told Eyewitness News they support Morgan's proposal.

"The city of Pawtucket has dedicated a significant amount of resources to upgrading and repairing our roads," Pawtucket Mayor Donald Grebien, a Democrat, said in a statement. "We are a distressed community, so every dollar counts. Over the past two years alone, we have repaired 45 miles of roadways and are on track to complete 12 miles this year."

Grebien said the city has a policy that prohibits work on roads that have been repaved in the last five years.

"This legislation seems to reinforce that," he said. "We try our best to coordinate with the utilities when establishing our road repair schedule for the year. While we understand that emergencies happen, our roads should be returned to, at a minimum, the condition they were found."

Cranston Mayor Allan Fung said he also supports the bill.

"For years, Cranston residents have put up with bumpy roads and insufficient patch jobs for too long," Fung, a Republican, said in a statement. "Some of the ongoing utility projects in our city have severely compromised numerous roads, causing damage to vehicles. This proposed legislation would give municipalities another tool to ensure our roads are as smooth and navigable as possible during repair projects."

Fund said Cranston adheres to the 90-day permanent-restoration policy.

"This legislation, if passed, would equip us with even more authority to make sure the job is done right," he said.

A spokesman for the R.I. Department of Transportation said officials there are still reviewing the specifics of the bill, but said they work closely with utility companies to try and prevent newer roads from being dug up. He said they've recently had face-to-face meetings with utility companies as RIDOT carries out its 10-year RhodeWorks plan.

"This outreach creates awareness so utility companies can align their capital improvements with ours so projects can be synchronized such that it will greatly reduce the chance of roads being dug into for utility work shortly after we have repaved them," said RIDOT spokesman Charles St. Martin. "And even for utility work done on an emergency basis, we remain in close contact to ensure the road is repaired to the same standard of the pavement before they worked on it. The companies have been very cooperative."

Even some utility companies told Eyewitness News they would be on board with the new policy, including the Narragansett Bay Commission, which handles wastewater treatment in northern Rhode Island.

"It is the NBC's standard procedure, after construction, to leave the roadway in better condition that it was before. In the vast majority of situations, we repave curb-to-curb after sewer construction," said Jamie Samons, a spokesperson for the agency. "Therefore, we would certainly not oppose this bill."

Morgan's ride home is a smooth one now: Wakefield Street has been completely resurfaced, as mandated, and is a smooth, black asphalt with a freshly painted double-yellow line. But she hasn't forgotten how it was before.

"They're doing this all over the state," she said. "And they need to do it right."

Morgan's bill has been referred to the House Municipal Government Committee.





Sections

Record Number of Junior Scientists Convene to Showcase Year-Long Work in RI

Friday, May 19, 2017













More than 700 elementary school students, teachers, and guests from twelve Rhode Island schools will gather at Goddard Park in Warwick for an environmental education conference to culminate the Narragansett Bay Commission's (NBC) Watershed Explorers program. The event will be held on Friday, May 19, 2017 from 10:00 a.m. to 1:00 p.m.

The NBC Watershed Explorers program is an award-winning hands-on water quality monitoring program that educates students and teachers in and out of the classroom about the health of their local watershed areas. The goal of the NBC Watershed Explorers is to promote advocacy by helping participants to build a relationship with each component of their watershed.

Students from the Paul Cuffee School and Meeting Street School in Providence, Sarah Dyer Barnes Elementary School in Johnston, Anna McCabe Elementary School in Smithfield, Kent Heights Elementary School and Orlo Avenue in East Providence, Agnes Little Elementary School and St. Cecilia School in Pawtucket, Centredale Elementary in North Providence, Chester Barrows School in Cranston, Saylesville Elementary in Lincoln, and Ashton Elementary School in Cumberland all participated in the NBC Watershed Explorers program this year.

These twelve schools will join NBC staff, and staff from Biomes Marine Biology Center, Save the Bay, the Aububon Society of Rhode Island, Roger William's Park Zoo, the New England Aguarium, and the Woonasquatucket Watershed Council for a day of environmental education activities.

The day will begin by welcoming guest speaker, Abby Abrahamson, an ambassador from Jane Goodall's Roots and Shoots National Youth Leadership Council. Ms. Abrahamson will discuss her work with Roots and Shoots, focusing on the importance of youth advocacy for the environment. After Ms. Abrahamson's address, one group from each school will perform a song, skit, or rap about a local macroinvertebrate. The day will culminate with the young scientists participating in some fun and informative environmental education activities.

"The Watershed Explorers at Agnes Little Elementary School in Pawtucket have had an incredible year under the guide of Cynthia Morissette. The planned in-class activities and field trips helped them learn the importance of their watershed and how to make educated decisions regarding the environment and the wildlife within it." -Grade 3 Teachers Agnes Little Elementary

Heather Engstrom a grade 5 teacher at Chester Barrows Elementary in Cranston notes, "The NBC Watershed Explorers Program is a wonderful, hands-on learning experience for my 5th graders. They were able to showcase their talents in the many activities and projects throughout the year. This is a great addition to any science curriculum."





'A momentous day' for R.I. shellfishermen: DEM relaxes restrictions on quahog beds in the upper Bay

By Alex Kuffner
Journal Staff Writer
kuffneralex
Posted May 26, 2017 at 9:24 PM

Updated May 26, 2017 at 9:24 PM

The DEM also announces that a seasonal closure of Greenwich Bay will be lifted and Cormorant Cove on Block Island will be reopened for the first time in a decade.

PROVIDENCE — Michael McGiveney and other shellfishermen call it the "lower Bay blues."

At times of heavy rain, highly productive quahog beds in upper Narragansett Bay close down because of fears of contamination from tainted runoff, forcing the men and women who harvest clams to take their boats south into the cleaner waters of the lower Bay to pursue their livelihood.

But under changes that were to go into effect at sunrise on Saturday, May 27, the Rhode Island Department of Environmental Management will remove the rain restrictions on about half the upper Bay and relax the restrictions on the other half. The decision was made in response to the continuing improvement in water quality in the Bay.

"I don't want to be overly dramatic, but this is really a game-changer for us," said McGiveney, president of the Rhode Island Shellfisherman's Association.

The DEM also announced Thursday afternoon that a seasonal closure of Greenwich Bay will be lifted and that Cormorant Cove on Block Island will be reopened for the first time in a decade. In addition, next year the agency will consider reopening the lower Providence River to shellfishing, with conditions. The area has been closed to harvesting for more than 70 years.

The waters in the upper Bay — in what are known as Conditional Areas A and B — have either been closed or restricted for a similar length of time. The last time the restrictions were tempered was in 2011, after the Narragansett Bay Commission completed the 3-mile-long combined sewer overflow tunnel under Providence, which captures polluted storm water during heavy rains and stores it for treatment later.

And in the years since, water in the Bay has continued to become cleaner and clearer. In 2015, the NBC, which operates the largest wastewater treatment system in the state, released test results that found that fecal coliform bacteria levels in the Bay had declined by 50 percent since the tunnel network went into use.

Also that 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 had dropped to half what they were in the 1990s, resulting in clearer water and fewer harmful algae blooms.

The DEM monitors water quality in the Bay on a regular basis and recent results confirmed the improvements, said Angelo Liberti, chief of surface water protection at the agency.

"There are certainly other improvements that have occurred at a number of the wastewater treatment plants in Rhode Island, but these improvements are really due to controlling the combined sewer overflows," Liberti said.

During rainstorms more recently, the DEM has enacted closures in the conditional areas, but instead of keeping them in place for the seven days that has been the standard, it has lifted them after only three or four days.

"But we didn't have enough evidence to change the criteria until recently," Liberti said.

The latest data merited removing the restrictions entirely on Conditional Area B — waters that are north of the line from Warwick Point to Poppasquash Point in Bristol and south of the line from Rocky Point pier in Warwick to Colt State Park pier in Bristol.

And recent testing also allowed for raising the threshold for closing Conditional Area A — which now extends from the northern edge of Conditional Area B to the mouth of the Providence River — to 1.2 inches of rain in a 24-hour period. Previously, the portion known as the Conimicut Triangle closed after 0.5 inches of rain and the rest of the area closed after 0.8 inches.

"This news is a great testament to water quality benefits enjoyed by the entire state of Rhode Island thanks to the investments of our ratepayers," NBC executive director Raymond J. Marshall said in a statement.

DEM director Janet Coit said the reopening marks a milestone in the ongoing efforts to clean up the Bay.

"This is a momentous day for Rhode Island, a day we celebrate progress in restoring water quality, and welcome shellfishermen back to historic waters," she said in a statement.

Liberti said that during particularly heavy rainstorms, closures may still go into effect. Further improvements are expected to come when the NBC embarks on Phase Three of the sewer overflow project. Plans for that phase are currently under review by the DEM.

The latest preliminary estimate for the work is \$760 million — down from an initial \$815 million — and it should get underway between 2021 and 2025, according to a spokeswoman for the NBC.

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PROVIDENCE — Even before 17 people were killed by a gunman at a Florida high school Wednesday, Rhode Island lawmakers were working on bills to...

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Expanded shellfishing opportunities announced for RI waters

By Michelle Gere (http://wpri.com/author/michellegerewpri/)

Published: May 27, 2017, 8:44 am | Updated: May 27, 2017, 3:53 pm



NARRAGANSETT BAY, R.I. (WPRI)- DEM officials say prime shellfishing areas have been expanded.

Beginning at sunrise Saturday morning, restrictions on parts of upper Narragansett Bay are now lifted.

Also affected Saturday, the new Conditional Area A will close after 1.2 inches of rain.

Previously, Conimicut Triangle waters closed at 0.5 inches, and Conditional Area A waters closed at 0.8 inches.

A review of historic rainfall data indicates this change will likely increase shellfishing opportunities in the former Triangle area by 85 days annually, and the remaining waters by 35 days.

"Through the efforts of DEM, the Narragansett Bay Commission and many partners, we have made incredible progress in cleaning up Rhode Island's waters," said DEM Director Janet Coit. "Once overwhelmed by raw sewage and other pollution, today our bays, rivers, and coastal waters are cleaner and healthier. The benefits of this to our environment, economy, and families are immeasurable. As a result of strong laws and investments such as the combined sewer overflow project, fishers and families have expanded opportunities to harvest and enjoy delicious, wild shellfish. This is a momentous day for Rhode Island, a day we celebrate progress in restoring water quality, and welcome shellfishermen back to historic waters. I look forward to our continued work together to reduce pollution and address other threats to ensure that all Rhode Islanders have access to a healthy and productive Narragansett Bay."

In addition, Cormorant Cove on Block Island is open to shellfishers for the first time in 10 years.

Restrictions had been in place in upper Narragansett Bay for the last 70 years.

DEM, along with its partners, will develop a management plan for the area before it is opened to shellfishing; this is to ensure the long-term sustainability of the shellfish stock. This work is expected to continue into 2018.

For more information on the shellfish harvesting reclassification, review the annual notice available at A new, interactive shellfishing map is also available. (http://www.dem.ri.gov./)

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DEM lifts shellfishing restrictions in portions of upper Narragansett Bay

by NBC10 News



NBC10 Photo

AA

For the first time in 70 years, Shellfishing restrictions for portions of upper Narragansett Bay have been lifted.

The restrictions were lifted starting Saturday morning at sunrise.

Under the changes Cormorant Cove on Block Island will be open to shellfishing for the first time in a decade. Also, the seasonal closure of Greenwich Bay will be eliminated.

The agency also says that it is considering reopening the lower portion of the Providence River in the near future, which has been prohibited for over 70 years.

DEM says the changes to the closures is mad in large part to the Narragansett Bay Commission's completion of Phase I and II combined sewer overflow project.



2017-06-01 / News

State OKs upper bay shellfishing in historic move



Shellfishing is a popular pastime in Jamestown for both commercial fishermen and this hungry seagull Sunday on the rocks at East Ferry. PHOTO BY ANDREA VON HOHENLEITEN

The state has opened prime shellfishing areas following reclassification, including a portion that has been off-limits since World War II.

Among the changes that took effect at sunrise Saturday, restrictions on portions of Upper Narragansett Bay, in place for the last 70 years, will be lifted. Also, all of Cormorant Cove on Block Island is open for the first time in a decade and the seasonal closure of Greenwich Bay has been eliminated.

Annual seasonal closures also went into effect during the Memorial Day weekend, including Dutch Harbor. Harvesting there is prohibited through Oct. 10.

Conditional closures in Upper Narragansett Bay have been lax following the Narragansett Bay Commission's efforts to improve combined sewer overflow. According to Gail Mastrati, spokeswoman for the Department of Environmental Management, this investment has led to dramatic improvements in water quality throughout the lower Providence River. As part of the reclassification of shellfishing waters, 3,712 acres in the upper bay have been opened to harvesting. Water quality monitoring, combined with tissue data from shellfish, shows that the lower portion of the Providence River holds potential as a new conditional area in the near future. Shellfishing has been prohibited in the river for more than 70 years.

"We have made incredible progress in cleaning up Rhode Island's waters," said Janet Coit, Rhode Island's environmental director. "Once overwhelmed by raw sewage and other

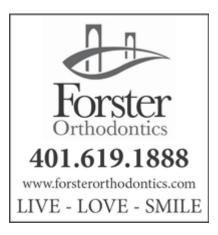
pollution, today our bays, rivers, and coastal waters are cleaner and healthier. The benefits of this to our environment, economy and families are immeasurable."

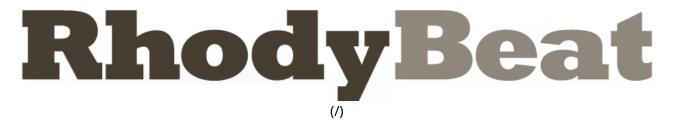
According to Mastrati, the Ocean State is known for its seafood and diverse culinary cultures. The state's booming food sector supports more than 60,000 jobs and the fishing industry is a vital part of the equation. In 2016, more than 100 million pounds of seafood arrived to local ports with an export value of more than \$1 billion. A significant contributor to the state's commercial fishing industry, wild harvest shellfish support the livelihoods of hundreds of fishermen year-round. More than 28 million quahogs were harvested from Narragansett Bay last year, contributing about \$5.5 million to the economy.

"This is a momentous day for Rhode Island, a day we celebrate progress in restoring water quality, and welcome shellfishermen back to historic waters," Coit said.

Consistent with federal requirements, some local waters, such as Dutch Harbor, are closed to shellfishing on a seasonal basis due to potential water quality impacts associated with marinas and mooring fields. Also closed through Columbus Day are Bristol Harbor, Fishing Cove in Wickford, Prudence Island's Potter Cove and Sakonnet Harbor in Little Compton.

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With cleaner waters, restrictions eased on bay shellfishing

Warwick Beacon (/warwick-trending/) · Tuesday, May 30, 2017

By John Howell

Too much rain has been a bad thing for quahoggers for decades, but as it turns out one of the wettest Aprils on record actually was just what biologists were looking for to confirm that the hundreds of millions of dollars spent to reducing the flow of pollutants into Narragansett Bay is working.

It is on the basis of water quality tests made during April that the Department of Environmental Management announced Friday that an area of the bay stretching north from Warwick Point to Rocky Point and east to Colt State Park in Bristol – more than 3,700 acres – will no longer be subject to closure following storms recording one inch of rain or more. On average, according to Warwick shellfishermen, the area rich with quahogs is closed between 20 and 30 percent of the year. Now that the water is clean enough it will be always open. DEM also lifted seasonal restrictions on shellfishing in Greenwich Bay.

The announcement confirms reports of cleaner bay waters from fishermen, boaters and people living along the bay ever since the Narragansett Bay Commission brought online its system of tunnels to hold the combined wastewater and storm water until it could be properly treated. Prior to the system when treatment facilities were overwhelmed by storm water flow, the combination of sewage and storm water went directly into the bay after being chlorinated, if that.

That was a problem recognized in 1946 when the state divided the bay into areas where shellfish were considered unsafe for harvesting because of the higher levels of bacteria based on rain incidents. The closer to Providence the less rain it took to close an area until reaching Conimicut Point, where the waters are permanently closed.

Now, with reduced levels of bacteria, the lower section of the Providence River north of Conimicut could be opened to shellfishing on a conditional basis. Studies are being performed with the possibility of a decision next year.

Angelo Liberti, DEM chief of surface water protection, said Friday computer models showed the water quality improving prior to the investment made by the NBC to capture and treat the water that would otherwise flow untreated into the bay. He was wishful at the time and now those improvements have lived up to their expectation.

It is also good news to rate payers whose increased costs are bearing fruit.

Jamie Samons, NBC public affairs officer, pointed out that the entire state is benefiting from the investment of \$365 million for the first and \$220 million for the second phase of the three-phase project. Since 2001 the average annual rate for a customer has climbed from \$140 to \$500, which to a large measure reflects the additional debt the agency has taken on. The third and most costly phase at a projected \$760 million would build holding tunnels to capture runoff that otherwise goes into the Seekonk and Blackstone Rivers that also eventually feed into the bay.

Samons said those plans are under review and the agency is seeking to delay implementation so that "we can retire some debt before we start phase 3." The concern is hitting users with rates that become unsustainable. As it is now, she said, NBC rates are in "the middle of the bell curve" of other wastewater treatment operators. NBC is the state's largest with 80,000 connections serving 360,000 people.

To those making their living from the bay, the prospect of additional waters opening north of Conimicut and lifting of the conditional status of a portion of the upper bay means more reliable and potentially increased harvest.

"We're ecstatic, it's a bit of a game changer," Michael McGiveney, president of the Rhode Island Shellfishermens Association, said Friday. While pleased with clearer waters and the prospect of increased harvests, McGiveney said the fleet of quahoggers has basically remained static in spite of efforts to bring in new people through programs it runs and low-cost student licenses. Licenses aren't required of those 65 years old and older.

McGiveney said the state has about 650 active shellfishermen. Out of a potential of 1,500 licenses about 800 have been issued, he said.

Warwick quahogger Jody King didn't see the permanent opening of the Area B waters as significantly impacting his bottom line. In fact, he thinks without limitations the area won't have the time "to set up" and, after an initial increase in harvests, it will taper off.

King is an advocate of the profession, finding satisfaction at being his own boss and at communion with nature. "My picture window is better than anybody else's," he said.

King estimated a "hard worker" can make between \$50,000 and \$60,000 a year.

According to the DEM, more than 100 million pounds of seafood arrived to a local port, with an export value over \$1 billion. A significant contributor to Rhode Island's commercial fishing industry, wild harvest shellfish support the livelihoods of hundreds of fishers year-round and provide nourishment and enjoyment to Rhode Islanders and tourists. More than 28 million quahogs were harvested from Narragansett Bay and local coastal waters last year, contributing some \$5.5 million to the economy, a value that increases significantly as the product hits the market.

"The opening of these shellfishing areas is a heartening testimony to the progress in the cleanup of the bay and the result of years of effort by many, many partners, support from voters and significant investments by the state and many towns and citizens," reads a statement released by Save the Bay.

In a statement, DEM director Janet Coit said, "Once overwhelmed by raw sewage and other pollution, today our bays, rivers and coastal waters are cleaner and healthier. The benefits of this to our environment, economy and families are immeasurable. As a result of strong laws and investments such as the combined sewer overflow project, fishers and families have expanded opportunities to harvest and enjoy delicious, wild shellfish. This is a momentous day for Rhode Island, a day we celebrate progress in restoring water quality and welcome shellfishermen back to historic waters."

The area previously identified as Conditional Area B encompassed the waters north of a line from Warwick Point to the Providence Point on Prudence Island to Poppasquash Point in Bristol and south of Conditional Area A. The new Conditional Area A generally includes upper bay waters south of the Providence and Warren Rivers and north of a line from Rocky Point pier to Colt State Park pier.

Also effective as of Saturday at sunrise, the new Conditional Area A will close after 1.2 inches of rain. Previously, Conimicut Triangle waters closed at 0.5 inches, and Conditional Area A waters closed at 0.8 inches. A review of historic rainfall data indicates this change will likely increase shellfishing opportunities in the former Triangle area by 85 days annually, and the remaining waters by 35 days.

This story was originally posted by Warwick Beacon. Click here (http://warwickonline.com/stories/with-cleaner-waters-restrictions-easedon-bay-shellfishing, 124768) to view the original story in its entirety.

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" How can you be angry when the opposition took a page out of your playbook? It isn't fair because the GOP didn't do it this time? I clearly remember the entire second term of \dots "

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WwkVoter on City warns of possible trash pickup delays (http://warwickonline.com/stories/delays-in-city-trash-pickup-possible, 131816):

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jfraser on City warns of possible trash pickup delays (http://warwickonline.com/stories/delays-in-city-trash-pickup-possible, 131816):

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" Marijuana citations incident to traffic violations...go figure. How many of these people have damaged the property or lives of others while high? I'd like to know the "

Calendar of events

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January 20 - March 1 | My Favorite Teacher Contest, Barnes & Noble Warwick, 1350 Bald Hill Road, Warwick, RI (http://warwickonline.com/stories/my-favorite-teacher-contest,131111)

February 21 - 23 | Newport Seal Watch Tours with Save The Bay, Bowen's Ferry Landing, 18 Market Square, Newport, RI (http://warwickonline.com/stories/newport-seal-watch-tours-with-save-the-bay,130502)

February 21 - 22 | Newport Seal Watch Tours with Save The Bay, Bowen's Ferry Landing, 18 Market Square, Newport, RI (http://warwickonline.com/stories/newport-seal-watch-tours-with-save-the-bay,130501)

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Improved water quality means more shellfishing

By SHAUN KIRBY Jun 2, 2017

PROVIDENCE—Narragansett Bay is getting healthier, the proof of which is no better shown than the recent announcement from the Rhode Island Department of Environmental Management (RIDEM) that select waters are being opened to shellfishing after long periods of closure.

"Through the efforts of DEM, the Narragansett Bay Commission and many partners, we have made incredible progress in cleaning up Rhode Island's waters," said RIDEM Director Janet Coit last week. "Once overwhelmed by raw sewage and other pollution, today our bays, rivers, and coastal waters are cleaner and healthier. The benefits of this to our environment, economy, and families are immeasurable."

On Block Island, all of Cormorant Cove will be open for shellfishing for the first time in over 10 years, and the annual closure of Greenwich Bay will be eliminated.

Restrictions on over 3,000 acres of water in the Upper Narragansett Bay have also been lifted to allow conditional shellfishing for the first time in 70 years.

Coit praised the Narragansett Bay Commission's combined sewer outflow (CSO) facility, a project which has been in the making for over 10 years, for reducing the amount of wastewater placed into the bay. Over 8 billion gallons of water has been treated through phase I and II of the CSO project. The commission is nearing completion of phase III, which will improve further water quality in portions of the Providence, Seekonk and Blackstone Rivers.

"This news is a great testament to water quality benefits enjoyed by the entire State of Rhode Island thanks to the investments of our ratepayers," said NBC Executive Director Raymond J. Marshall, PE, in a statement last week. "In less than 10 short years since Phase I of the CSO project went on-line, we have seen water quality in Narragansett Bay improve substantially, and now we witness the end to a 70-year restriction on shellfishing. The future looks bright for the bay, and we at the NBC are proud to play a major role in the Bay's recovery."

RIDEM's announcement comes on the heels of the Rhode Island Shellfish Initiative, a partnership of state, federal, and environmental advocacy groups which aims to boost the visibility and production of shellfishing business in local waters.

"For a hundred years, [the shellfish industry] has been fighting more than anyone to protect our waters from industrial waste, sewage, runoff," said U.S. Senator Jack Reed at the initiative's unveiling event last month. "Not only so we can enjoy seafood and they can harvest it, but so that we could enjoy the waters of Narragansett Bay. We've also led the way educationally - URI, Roger Williams University, Brown University working together to make this not only an industry, but also a scientific endeavor, so thank you for that."

In Rhode Island, over 1,200 commercial fisherman landed over 100 million pounds of seafood last year, an export value of over \$1 billion. Additionally, more than 270 acres have been leased to businesses growing oysters and other shellfish in the bay.

"The improvement in water quality will have a tremendously positive effect on our industry and allow greater access to some of the most important shellfish grounds in the bay," said Mike McGiveney, President of the Rhode Island Shellfishermen's Association. "It is an economic and environmental win for all Rhode Islanders."

Some areas of the bay will continue to be closed from Saturday, May 27 through Tuesday, Oct. 30, because of increased water quality impacts from recreational uses at marinas and mooring fields. These areas include: Dutch Harbor in Jamestown, Great Salt Pond and Trims Pond on Block Island, Potter Cove on Prudence Island, and Fishing Cove in North Kingstown's Wickford Harbor.

For more information on RIDEM's shellfishing closures, visit www.dem.ri.gov.

GOLOCAL Prov

More Shellfishing Areas Opened Means More Revenue for RI, Says NBC's Mesolella



Thursday, June 15, 2017

GoLocal LIVE



Vinny Mesolella

The recent announcement by the State of Rhode Island that previously off-limits shellfishing areas have been re-opened due to their improved health has a direct economic impact, said Narragansett Bay Commission Vinny Mesolella on GoLocal LIVE on Wednesday - noting that the NBC and ratepayers' investments have "paid off" for now -- and that more are needed.

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State utility regulators warn budget transfers will raise sewer rates, impact electrical customers

By Patrick Anderson Journal Staff Writer patrickanderso_

Posted Jun 23, 2017 at 5:34 PM Updated Jun 23, 2017 at 8:59 PM

PROVIDENCE — Rhode Island's hospitals and courts received a boost in the state budget passed by House lawmakers Thursday night, but state utility regulators say electricity users and many Providence area sewer customers could take a hit.

The \$9.2-billion budget, passed on a party line vote, used a number of transfers from outside accounts to plug a revenue shortfall. Among the more controversial were \$12.5 million taken from an energy efficiency program funded by a surcharge on electricity bills and \$5 million from sewer provider the Narragansett Bay Commission.

Both transfers came over the objections of state utilities regulators, who warned lawmakers they could lead to sewer rate hikes and a bad deal for electric customers.

A June 22 letter from the Public Utilities Commission to House Speaker Nicholas Mattiello and Senate President Dominick Ruggerio said the utility "does not have excess funds available to make that transfer" and the \$5 million Narragansett Bay Commission transfer "will need to be restored through future rates."

The Narragansett Bay Commission provides sewer service for 41 percent of the state's residents, the letter said.

Regarding the \$12.5 million transfer from the Energy Efficiency Program, which is funded through charges on National Grid utility bills, the PUC wrote that it would mean less value for ratepayers from the program, which had a \$120 million budget this year.

Also on Thursday, a group of 10 manufacturers, trade associations and service providers — including high electricity users — wrote a letter opposing the transfer. The companies included Schneider Electric, The Dow Chemical Company and Ameresco.

Things turned out better for hospitals.

Language added to the budget Thursday would restore a payment that compensates hospitals for Medicaid's low reimbursement rates. Even partially offset with a licensing fee increase also added to the budget, the changes are expected to provide hospitals an additional \$12.5 million next year, according to projections from House fiscal staff.

That change came after lawmakers had already restored some of the proposed \$39 million in Medicaid cuts, some of which hit hospitals, Gov. Gina Raimondo had proposed in January.

How did it happen?

Amanda Barney, spokeswoman for the Hospital Association of Rhode Island, said restoring the hospital Medicaid payment while raising fees allowed the state to use more federal funds.

"Hospitals worked collaboratively with state leaders to ensure federal funds were maximized," Barney wrote in an email. "Both the hospitals and the State are beneficiaries of this collaborative approach."

The Hospital Association of Rhode Island is led by M. Teresa Paiva Weed, who stepped down as president of the state Senate earlier this year. She agreed not to lobby the General Assembly for a year.

Changes to the budget Thursday also added \$950,000 to fill vacant positions, including magistrates, in the court system.

Lawmakers Thursday also returned \$100,000 — half of the funding Raimondo had requested —for the annual grants to promote local seafood and agriculture.

Despite state revenues coming in lower than expected this year, those and other one-time sources of revenue helped lawmakers draft a budget that lowered total spending only \$5.2 million from Raimondo's proposal in January. (The state's share of that spending would decline \$25 million from Raimondo's budget proposal.)

Other spending additions to the budget Thursday included \$300,000 for the "Pay for Success" program to reduce recidivism among former prisoners and \$460,000 in local aid for regional school transportation.

The budget moves on to the Senate for consideration starting with the Senate Finance Committee on Tuesday.

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Rhode Island's New Renewable-Energy Laws Address Economy and Climate Change

August 16, 2017

Faulkner/ecoRI News)





Video and text by TIM FAULKNER/ecoRI News staff

NORTH KINGSTOWN, R.I. — Gov. Gina Raimondo recently held a bill-signing ceremony to brag about the unusually high number of renewable-energy bills passed by the General Assembly this year — and to show her commitment to address climate change.

Raimondo explained the flurry of bills was the result of new thinking and new people at the Office of Energy Resources, Division of Public Utilities and Carriers, Infrastructure Bank and Department of Environmental Management. For about a year, she said, this group focused on overlapping issues related to the environment, energy, the business climate and regulations.



The intent, Raimndo said, is to "try to create a single team on the field across departments so that we could properly attack the challenges of climate change."

So far, she said, green-sector jobs and energy-reduction goals are ahead of schedule. Raimondo touted her goal of 1,000 megawatts of renewable energy by the end of 2020.

Yet a major hurdle remains for some environmentalists: a carbon tax.

Although a carbon-tax bill (\$365, H5369) died in committee this year, Raimondo said, after inking her name to the six bills, that she would likely sign a carbon-fee bill if one reached her desk.

"I do support it. It's the right way forward," she said. "I urge the General Assembly to come up with a bill that moves us in that direction because I think it's the right way to go."



Nationally, a carbon tax has Republican — or at least center-right GOP — support and the backing from multinationals such as Proctor & Gamble and General Motors. The fee on oil, natural gas, gasoline, diesel and coal is considered the most effective free-market solution to curbing carbon emissions and transitioning to renewable energy. The fee subsidizes incentives for renewable projects while paying an annual dividend to businesses and residents.

Sen. Sheldon Whitehouse, D-R.I., and Rep. David Cicilline, D-R.I., sponsored a revised carbon-tax bill in late July. The legislation kicked off with an event hosted by the conservative think tank American Enterprise Institute.

Eight states, including Massachusetts and Connecticut, and the District of Columbia are considering carbon-tax programs. Canada intends to implement a nationwide carbon tax in 2018, after British Columbia enacted a fee on carbon in 2008.

A statewide fee in Rhode Island, however, is opposed by powerful business advocacy groups such as affiliates of the Chamber of Commerce, Rhode Island Public Expenditure Council and oil distributors. President Trump and his cabinet reject the notion of anthropogenic climate change and thereby oppose the carbon-fee concept.

For some environmentalists and climate activists a state carbon fee seems like the most likely option in the near future. In July, the Civic Alliance for a Cooler Rhode Island sent Raimondo a letter demanding swifter action on cutting carbon emissions and fossil-fuel use and adopting climate-change mitigation.

National Grid, Rhode Island's primary electricity distributor, wasn't at the recent bill-signing ceremony, nor was the company mentioned in remarks by elected officials and state energy officials such as Carol Grant, head of the Office of Energy Resources.

Grant said after the Aug. 9 event that National Grid wasn't omitted intentionally. The utility, she said, is an important partner in many of the state's efforts to advance renewable energy.

National Grid spokesman Ted Kresse said the utility supports the legislation but was unable to attend the ceremony because of a scheduling conflict.

In the past, National Grid has been reluctant to support several of the state's primary energy incentives, such as the renewable-energy standard and net metering. Three of the renewable-energy bills passed this year were extension of those programs.

H5274 and S112 extend the state's successful fixed-term and fixed-pricing RE Growth program for 10 years. National Grid manages the applications for the tariff program, which mandates that the utility dedicate 40 megawatts of power production annually to new wind and solar projects.

National Grid put up a much bigger fight over efforts to determine who pays for connecting large wind and solar projects to the electric grid. Disputes over the so-called interconnection costs delayed the operation of the three turbines at the Narragansett Bay Commission in Providence and several turbines being built by Wind Energy Development of North Kingstown.

H5483 and S637 addressed those concerns and established deadlines for the interconnection work and related applications.

Renewable-energy development on farms and open space also had a breakthrough. H6095 and S570 establish that 20 percent of protected land can be used for renewable-energy projects while still keeping its property-tax status. A bill establishing siting rules for wind and solar projects died in committee, after opposition from some farmers and communities such as South Kingstown that are leery of wind turbines.

Raimondo insisted that the bill she signed doesn't preempt local siting regulations. "Local issues have to be dealt with at the local level," she said. "So I am not going to tell any locality what to do."

Another of the new bills, however, makes it easier for solar developers to do get their projects going. H5575 and S562 instruct the Office of Energy Resources to establish a statewide solar application and permit that all municipalities use for new projects.

The final bill, H5618, adds school, hospitals and all other nonprofits to the list of institutions that can qualify for the virtual-net-metering program. Often referred to as shared solar, virtual net metering allows institutions and groups to fund renewable-energy projects by selling portions of a renewable-energy system. The ownership structure allows property owners and renters with limited funds or no roof to buy into and receive the benefits of renewable energy. Low- and moderate-income housing developments are expected to benefit from the expansion of the net-metering rules.

Raimondo said the six bills aren't symbolic but concrete steps that make renewable energy easier to build and less expensive while creating jobs.

"This will guarantee that we will walk the walk in making Rhode Island a greener place," the governor said.

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February 22, 2018

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Hartford Avenue sewer project begins



(/uploads/original/1503595993_c6d3.jpg)

UNDER CONSTRUCTION: Work crews began the Narragansett Bay Commission's sewer extension project on Monday. According to the Narragansett Bay Commission, traffic on Hartford Avenue will experience some delays, but the road will not be closed during construction.

(SUN RISE PHOTOS BY TIM FORSBERG)







Posted Thursday, August 24, 2017 4:00 pm

By Tim Forsberg



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TRENDING STORIES

Construction work began this week for a major sewer and water line extension project on Hartford Avenue.

"Johnston, for the next several months, may wish that we didn't exist, but after that Johnston is going to have a really good underground," said Jamie Samons, public affairs manager with the Narragansett Bay Commission (NBC).

The NBC project will add nearly 5,400 linear feet of sewer lines under the righthand lane of Hartford Avenue westbound. Construction began on Monday just past the off ramp for Route 295 South. The righthand lane is closed for several hundred feet to accommodate construction crews.

D'Ambra Construction will facilitate the \$1.65 million project. In July, the Town Council approved an ordinance to borrow up to \$2,435,000 for the installation of new water lines and upgraded meters, along with athletic facility improvements. Construction of the sewer lines is expected to be complete by the end of this year.

Water line work is expected to begin next year, and once complete the Department of Transportation will resurface the entire project area as part of a repaving project beginning in Scituate at Danielson Pike and heading east to the intersection of 295 southbound. According to town officials, the project will open over 150 acres for businesses that would depend upon sewer and water improvements.

"This project, because Hartford Avenue is such a wider street and a different type of road than Greenville Avenue, we anticipate that traffic won't flow as easily as it does normally, but there's still plenty of room to have a good traffic flow," said Samons.

Work times are 6 a.m. until 3 p.m.; however, crews are authorized to work later should the situation arise. No detours are expected during the construction. If everything goes according to plan, by next November all work, including the repaving of Hartford Avenue, will be completed.

As far as I know, there hasn't been any hiccups yet," said Deputy Chief Joseph Razza of the Johnston Police Department of the change in traffic pattern. "I haven't gotten any calls yet about any issues.

Those wishing for more information or daily updates on the project, may visit the NBC's Facebook page at www.facebook. com/narrabay.



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Every Saturday, starting June 13, 2015 - June 1, 2018 | Lydia's Closet Thrift Shop, Edgewood Congregational Church, 1788 Broad Street, Cranston, RI (/stories/lydias-closet-thriftshop, 103110)

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Enough Electric Rate Rhetoric - Guest MINDSETTER™ Handy

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Wednesday, August 30, 2017 Seth Handy, GoLocalProv Guest MINDSETTER™

This is a response to the Providence Journal's editorials on National Grid's rate proposal, including "Blame Policymakers for National Grid's 53% Rate Hike" (8.3.17) and "Costly Choices on Energy" (8.26.17). The Journal refused to publish this response. The blaming is that these prices are due to retiring power plants, inadequate new supply and a lack of pipelines to bring natural gas here during winter months when we need it for heat and electricity.

Information about our regional supply comes from the independent system operator (ISO-NE) who manages our wholesale market. The region's coal, oil, and n, clear plants are retiring - 4,200 megawatts, or 15% of our total supply between 2012 and 2020. Facilities like Brayton Point are decommissioned because they cannot compete economically against newer, faster and cleaner generating sources.

10,100 megawatts of efficiency and renewables are proposed for development in this region, 6,400 megawatts of new natural gas fired plants. Often renewables are not registered with ISO and are not

counted in ISO's capacity calculations (shamefully). Nevertheless, the fact that efficiency and renewables are the strongest competitors in this region's market is borne out when gas plants, like Burrillville, lose out in ISO's forward capacity auctions, because they are too expensive.

Finally, regarding pipelines needed to move natural gas from the shale gas mines to our end of the pipe. The \$3.2 billion Access Northeast Pipeline proposed by National Grid and Eversource fell apart when the Massachusetts Supreme Court ruled that the utilities could not charge electric customers for the cost of moving the gas they want to sell us. The gas industry was not willing to take the risk of investment given competitive forces so the Court held it was inappropriate for gas pedlars to put that risk on electric customers.

What can we do about such uncompetitive costs? Take advantage of efficiency and renewables to reduce reliance on the region's wholesale supply. The Narragansett Bay Commission, reduced their load 10% through efficiency and sourced 45% of their remaining supply from renewables for a financial benefit of \$4.7 million, and are pursuing 100% renewables for good reason. Governor Raimondo ordered state facilities to use 100% renewables by 2025. Private sector leaders like Toray Plastics generate their own electricity from renewables and a combined heat and power plant. Even JP Morgan Chase, no bastion of liberal ideology or bad investments, will meet all of its global energy needs from renewables by 2020.

Our state energy plan, developed with extensive input from Rhode Island's energy stakeholders, calls for diversification of our electricity supply to ease costly overreliance on one fuel, enhance our energy security, and to improve our environment. More recently, Rhode Island's energy stakeholders (including National Grid and the Energy Council of Rhode Island) spent months discussing how to bring down Rhode Island's energy costs. They had many good ideas like time-based rates that reward customers for lower consumption and more supply during peak demand when electricity is most expensive. Economic innovation comes when we overcome outdated, unaffordable thinking.

State leaders are moving our utility to a business model that ensures its interests in gas and transmission do not eclipse the drive for a new energy future. They are planning for a better distribution system that will enable that evolution and anticipating electrification of cars and heating/cooling systems so that we can source the new loads efficiently from our best supply options.

It is too bad that National Grid's last energy procurement plan was filed in March 2016 and its rate case was filed before all this good rethinking takes hold. Stakeholders, advocates, and policymakers have unanimously resolved to put Rhode Island on a path to lower cost electricity and a much better energy future.

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Seth Handy is a lawyer based in Providence.



Sewage treatment agency going to 100% renewable power

By Alex Kuffner Journal Staff Writer kuffneralex

Posted Aug 30, 2017 at 8:20 PM

Narragansett Bay Commission signs deal with solar farm developer, complementing its use of wind, biogas.

PROVIDENCE — The largest wastewater treatment agency in Rhode Island is on its way to getting all of its power from renewable sources after signing an agreement with a company building large solar farms in Coventry and Richmond.

The Narragansett Bay Commission, which operates treatment plants in Providence and East Providence that serve 360,000 people in 10 local communities, announced the deal on Wednesday with Green Development, the North Kingstown-based company formerly known as Wind Energy Development that has installed wind turbines in Coventry, Portsmouth and North Kingstown.

Green Development is planning to build a 5.45-megawatt solar project in Richmond that's scheduled to go into operation by the end of this year and a 4.24-megawatt project in Coventry set to go on line next year.

The solar arrays would complement the commission's half-dozen 1.5-megawatt wind turbines — three in Coventry and three at its Fields Point facility on the Providence waterfront — and a 600-kilowatt biogas plant under construction at the commission's Bucklin Point facility in East Providence that would start supplying power next summer.

Unlike the turbines or the biogas facility, the commission would not own the solar farms. It would instead be supplied with power under a 25-year agreement with Green Development, which would install and own the arrays. Over 25 years, the deal is expected to save the commission \$18 million and offset an estimated 110,092 metric tons in carbon emissions.

The commission's energy usage fluctuates from year to year depending on how much wastewater and stormwater it treats. In rainy years, usage goes up. In dry years, it goes down. But with all three different sources of renewable energy, the commission should be able to get all of its power.

"Some years it will be a little more and some years it will be a little less," said spokeswoman Jamie Samons. "Generally, we'll be right in that 100 percent area."

The commission installed its first three wind turbines in 2012 and set a goal of total reliance on renewable energy by 2020.

"The dollars we save on energy can help buffer the other costs the NBC must undertake to meet our clean water mandates," commission chairman Vincent Mesolella said in a statement.

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Narragansett Bay Commission Adding Solar, Will Be Nearly 100% Renewable

Thursday, August 31, 2017 GoLocalProv Business Team



The Narragansett Bay Commission (NBC) is moving towards a 100 percent usage of renewable energy sources for its own source of energy.

NBC has signed an agreement with Green Development, Inc. (formerly Wind Energy Development, Inc.) to construct two solar energy farms to enhance the NBC's sustainable energy portfolio. The two solar projects, a 4.24 MV array in Coventry, Rhode Island, and a 5.45 MW array in Richmond, RI, will complement the NBC's six existing 1.5 MW wind turbines.



Chairman Mesolella

Over twenty-five years, the solar projects will save over \$18 million in electric costs from selling renewable energy credits and offset an estimated 110,092 metric tons of carbon dioxide equivalents.

Recently, NBC Board of Commissioners approved the project. The move is in keeping with the NBC Chairman Vincent Mesolella's commitment to pursue full reliance on renewable forms of energy by 2020.

After extensive review and evaluation by NBC staff and an independent expert, Green Development, Inc., based in North Kingstown, RI, was determined to have a superior submission in a competitive request for qualifications and proposal (RFQ/P) process.

The NBC is able to receive benefits from off-site generation of renewable energy due to Rhode Island's net metering law, passed by the RI General Assembly in 2016. The NBC is Rhode Island's largest wastewater treatment authority and was one of only 60 utilities worldwide to be named a Utility of the Future in 2017.



In addition to the solar projects and the existing wind turbines, the NBC is currently in construction of a 600kW Combined Heat and Power (CHP) engine that will operate on renewable biogas (a by-product of the

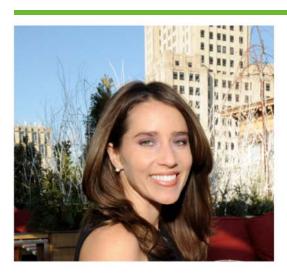


wastewater treatment process) at the Bucklin Point Wastewater Treatment Facility in East Providence.

"The NBC will essentially achieve net zero energy use with these projects," said NBC Chairman Mesolella. "We're proud to say that we lead the nation in renewables."

The Richmond project will go on-line by the end of 2017. The Coventry project will follow in spring 2018 and the biogas project in summer of 2018.

"The dollars we save on energy can help buffer the other costs the NBC must undertake to meet our clean water mandates," Mesolella said. "The projects benefit both the environment and our ratepayers and make our state a better place to live, work, and enjoy."



Previous Slide

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

O'Brien, who may be Rhode Island's most-

She was most recently at WJAR Channel Chances are, you checked in and got a tra

The television newswoman, who got her do as a weather and anchor traffic at KVEW in KBMT in Texas, before landing in Rhode Is Personality" in 2014.

O'Brien's work as an animal rescue advocabest-liked media personalities in the marke

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Water main break a real party pooper



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ON HOLD: The engagement party of Jaimie Carmody was delayed after a water main break.

SUBMITTED PHOTOS









Posted Thursday, August 31, 2017 8:15 am

By Tim Forsberg

Imagine planning an engagement party for your only daughter, with a full, elegant lawn party planned for more than 150 guests to celebrate the occasion. Waiters, waitresses, bartenders, a full menu, and more than 20 houseguests are ready to start the festivities.

And then the water turns off without warning.



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TRENDING STORIES

It happened to Rita Carmody of Belknap Farm Drive on Saturday, Aug. 19. According to Rita, she'd been planning a party for her daughter Jaimie's engagement to Joe Bogart for more than four months. She had a guest list of over 150 people and had spent well over \$5,000 in preparation for the day's event. Just as cooking and guest preparations were to start, the water stopped.

"Well, they broke a main. I had no water; it was a total disaster," said Rita of the sewer and water extension project on Greenville Avenue, the source of the day's problems.

The family had 22 houseguests from out of state at the home, who then had to be shuffled around to take showers at friends and family's houses. Rita went to the work site on Greenville Avenue three times to speak with the site manager and, according to her account, was told several times the water would be back on in a couple of minutes.

"This was hours. I couldn't finish cooking, my party was delayed two hours, it was a nightmare," said Rita.

The Carmodys purchased the home off Greenville Avenue just over a year ago. She, along with other residents, have been inconvenienced with traffic delays, detours and more as part of the recent projects surrounding the Citizens Bank Campus construction.

"I've had it. The residents here are not getting anything out of this, and we are inconvenienced so badly every day. We don't even know which way we should come home from work," said Rita. "People on my street, we are just so over this. It was a Saturday. We work five days a week and hard and I planned for so many months. This is crazy. What they did to my party was just unacceptable."

Rita said there were no showers available, no working toilets, and she had to send guests out to get bottled water to cook pasta for the event. She even went to the police station, which provided contact numbers for the Narragansett Bay Commission (NBC), which oversees the project, as well as Di Gregorio Corporation, the contractor working on the sewer and water project.

"If I would have known that this project was happening I would never have bought my home a year ago. This home was everything I wanted, except that the minute I moved in I got hit with torn up roads," said Rita. "I had no idea that was going to happen; believe me, I would not have bought the house. Do I believe that buyers will now be knocking down the doors to live around here now? No, I don't."

Rita states that she's already contacted an attorney and her councilperson and sent out a certified letter to the agent that deals with Di Gregorio. She also reached out to Jamie Samons, the public affairs manager with the Narragansett Bay Commission.

"Oh, my gosh, Rita Carmody, that poor woman," said Samons when contacted about the issue. "She has all of our sympathies, and it's a horrible thing to have happened."

According to Samons, the water main break occurred when work crews were replacing the water line. Whenever crews have to dig under a water line, they typically dig by hand. While they were digging under a joint of the water line they were going to replace, they found that the line was completely rotted out and it disintegrated.

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Every Saturday, starting June 13, 2015 - June 1, 2018 | Lydia's Closet Thrift Shop, Edgewood Congregational Church, 1788 Broad Street, Cranston, RI (/stories/lydias-closet-thriftshop, 103110)

Sunday | New Date- 14th Annual Polar Plunge benefiting A Wish Come True, Easton's Beach (1st Beach), 175 Memorial Blvd., Newport, RI (/stories/new-date-14th-annual-polar"This is the old asbestos line that's being replaced. As a result, they had to shut off the water, and about 100 people lost water for about an hour and a half, and Ms. Carmody was one of them unfortunately," said Samons.

The shutoff prevented a larger emergency and was under control after about two hours.

"Unfortunately, really unfortunately, it was apparently the day of her daughter's engagement party and she had 150 people coming to her house, so to add that on top of existing frustration about the construction to begin with, anyone would understand that she would be absolutely incensed," said Samons.

Samons told Rita that she could file a claim with Di Gregorio. While Samons can't say with any certainty what will come of that claim, she advised Rita "that's her best thing to do."

"This is a pretty singular situation. We've never really run into anything like this before. We've certainly had issues on past construction projects where people have had their car damaged or something like that and those are generally handled pretty quickly, but this is a new and serious situation," said Samons.

Samons added that she doesn't believe Di Gregorio was in any way negligent or responsible for the rotted water pipe and resulting loss in water service that unfortunately affected Ms. Carmody's party. Still, she does understand and sympathize with her frustration and anger.

Calls to Di Gregorio for comment on the matter were referred back to the NBC.

"It is a difficult job but an important one to the town of Johnston and the state of Rhode Island. Unfortunately, disruptions in service and inconveniences do occur in a project of this type and magnitude, especially when older or unstable infrastructure is involved," said Samons. "The contractor and the entire team consisting of the town, Citizens, PWSB (the water supply board), RIDOT and the NBC are doing all they can to complete the project as quickly and efficiently as possible."

Rita's party did eventually take place, albeit delayed, and good memories were made. While she hopes a similar situation doesn't occur on her daughter's wedding day, she does hope for some form of compensation for her damages claim.

"How do you put a number on the stress? Whatever they're going to give me I'll be happy because I put a lot of extra money into this," said Rita. "I'm just so frustrated right now, I just want them to hurt like I did."

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Wind, Solar & Biogas: R.I. Wastewater Treatment Agency To Go 100% Renewable

Posted by **Betsy Lillian** - August 31, 2017

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As planned, the Narragansett Bay Commission (NBC), a major sewage treatment agency in Rhode Island, is officially on the path to being powered by 100% renewables.

Last year around this time, the Providence-based NBC, which already owns several wind turbines, announced that it was planning to operate entirely on renewable energy in two years' time.

Now, according to local coverage from the <u>Providence Journal</u>, the commission has signed a 25-year power purchase agreement with Rhode Island-based Green Development (formerly Wind Energy Development), whose under-development solar farms in Richmond and Coventry are both scheduled to begin operations this year and next year, respectively. The NBC anticipates saving \$18 million and offsetting more than 110,000 metric tons of carbon emissions over the 25-year agreement.

Notably, the NBC, which serves roughly 360,000 people in Rhode Island, already owns six 1.5 MW wind turbines in the state, the report says. In addition, a 600 kW biogas project is under construction at its facility in East Providence. With wind, solar and biomass combined, the agency now expects to reach its 100% renewables goal when the projects come to fruition.

The full Providence Journal coverage can be found here.

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Will climate change negate Bay cleanup? Today's workshop to discuss the 500-page report on Bay conditions

By Alex Kuffner Journal Staff Writer kuffneralex

Posted Oct 23, 2017 at 12:01 AM

The effects include warming waters that could contribute to the growth of algae and bacteria in the Bay, rising seas that could flood low-lying treatment plants and more severe storms that could overwhelm stormwater infrastructure.

PROVIDENCE, R.I. — Rhode Island and Massachusetts have made huge strides in cleaning up Narragansett Bay by upgrading sewage treatment plants and reducing the amount of contaminated runoff, but those improvements could be negated by the impacts of climate change, according to a comprehensive report that will be officially released on Monday.

The effects — which, the report says, already are under way — include warming waters that could contribute to the growth of algae and bacteria in the Bay, rising seas that could flood low-lying treatment plants and more severe storms that could overwhelm stormwater infrastructure.

The 500-page report from the Narragansett Bay Estuary Program took three years to write and bases its conclusions on an analysis of 24 environmental indicators for the Bay's watershed, which covers some 1,705 square miles and includes the Pawtuxet, Blackstone and Taunton river basins.

"If you look back to the Bay of the 1970s, it's extraordinary the progress we've made," said Thomas Borden, director of the estuary program.

But, he added, "The climate change implications are profound."

John King, chair of the estuary program's science advisory committee, said that in many ways, Rhode Island and Massachusetts have been successful in tackling pollution that had plagued the Bay for decades. Solutions to the problems that are projected to arise, however, won't be so clear cut.

"We're improving the Bay and have achieved quite a lot in terms of reducing nutrients and contaminants," said King, a climate scientist and professor of oceanography at the University of Rhode Island. "The bad news is there's a steamroller coming called climate change. In a decade or two, it's going to roll right over us and crush us.

The report will be released at an event at Save The Bay's headquarters on the Providence waterfront that is set to be attended by Rhode Island's congressional delegation, Rhode Department of Environmental Management director Janet Coit and Massachusetts secretary of energy and environmental affairs Matthew Beaton. A workshop to discuss the report's findings will follow.

It is the second report of its kind produced by the Narragansett Bay Estuary Program. The first was released in 2009. (Both are available at **nbep.org**).

In the eight years since the original report came out, a lot has changed. Although upgrades to the region's treatment plants were under way following the historic Greenwich Bay fish kill in 2003, the positive effects of reducing nitrogen and other nutrient levels had yet to be fully felt when the first report was being written.

Likewise, the tunnel network under Providence designed to capture untreated stormwater had yet to be completed by the Narragansett Bay Commission, which operates the largest wastewater treatment system in Rhode Island.

The new report documents some of the benefits of those improvements. From 2008, when the combined sewer overflow (CSO) tunnel was completed, to 2014, fecal coliform bacteria levels in the Bay were down by 50 percent with even larger decreases in the upper portions of the Providence River.

Nutrients in the Bay in 2015 were found to be half of what they were in the 1990s, resulting in clearer water and fewer harmful algae blooms. Those improvements were due to the tightened regulations that forced treatment plants to upgrade their systems.

The new report summarizes past findings but also looks forward to future research and monitoring needs. One question of critical importance to the Bay is how treatment plants and the CSO network will be affected by the increasing rate of precipitation and rising sea levels, said Borden.

"The report sets up a framework for continued study of the Bay and its watershed," he said.

King applauded efforts in Rhode Island to plan for the effects of climate change, singling out work by the state Coastal Resources Management Council and the University of Rhode Island.

But he also talked of the need to step up efforts to protect natural lands in the watershed. About 15.5 percent of the watershed's undeveloped land has been protected as open space. But 41 percent remains unprotected.

Preventing those areas from being developed is one way of helping to ensure the future health of Narragansett Bay, King said.

"It's terrifying what the worst-case scenarios are," he said. "But don't throw up your hands."

akuffner@providencejournal.com

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Mayor Elorza sees pension solution in water supply





By <u>Dan McGowan (http://wpri.com/author/dan-mcgowan-wpri-com-reporter/)</u> and <u>Walt Buteau (http://wpri.com/author/walt-buteau/)</u>

Published: October 31, 2017, 5:41 pm | Updated: October 31, 2017, 6:40 pm



PROVIDENCE, R.I (WPRI) – As he seeks ways to strengthen Providence's severely underfunded pension system, Mayor Jorge Elorza plans to again ask state lawmakers to allow the city to monetize its water supply when they return to work in January.

Elorza told Target 12 he believes the sale or lease of the water system could generate more than \$300 million for the city, all of which he claims would be deposited into the city's pension fund.

"We have the best quality water and it's sold at the lowest rates," Elorza, a Democrat, said in an interview. "And it's an asset that frankly is worth more in someone else's hands than it is in ours since we're so heavily regulated by the Public Utilities Commission."

Related: <u>How Buddy Cianci made Providence's pension crisis worse</u>
 (http://wpri.com/2017/10/30/how-buddy-cianci-predicted-providences-pension-crisis-and-then-made-it-worse/)

A combination of factors – including a 1991 decision to award generous benefits to retired public safety workers and city leaders' repeated failure to make adequate contributions to the pension system – increased Providence's unfunded pension liability from \$167 million in 1993 to \$985 million in 2016 (http://wpri.com/2017/10/30/how-buddy-cianci-predicted-providences-pension-crisis-and-then-made-it-worse/), according to current and historic city financial documents. As of last year the city had just 25% of the money it needed to cover future payments to retirees, according to a projection by its actuary.

While city leaders have made a slew of changes to retiree benefits in recent years in exchange for a guaranteed increase in the amount the city deposits into the pension fund each year – in the current fiscal year, the pension contribution is \$78 million – Elorza maintains the payments will eventually become unaffordable.

"We don't want to nibble around the edges," Elorza said. "We need a big solution to it."

Providence Water sells water directly to approximately 75,000 retail customers throughout the state and provides water to eight other wholesale customers. The city owns the land in Scituate used for its water operations. The taxable value of the land itself was \$260 million in 2016, according to the town's <u>annual audit</u>

(http://www.municipalfinance.ri.gov/documents/data/audits/2016/Scituate2016Audit.pdf).

Elorza asked the General Assembly this year to approve legislation creating a regional water authority that would have the ability to buy or lease water systems, but lawmakers took no action on the proposal after House Speaker Nicholas Mattiello said he opposed the bill (http://wpri.com/2017/05/02/speaker-mattiello-opposes-elorza-administrations-regional-water-board-bill/).

Critics said giving Providence the ability to monetize the water supply would be a bailout for Providence on the backs of taxpayers from across the state, but Elorza called it a "solution within our grasps." He has repeatedly said he opposes privatizing the water system.

Mattiello said Monday he is open to reviewing a new proposal from the city, but he declined to comment further.

A consultant hired by the city this year estimated that the assets owned and operated by the Providence Water Supply Board are likely worth \$404.2 million.

The city paid MR Valuation Consulting \$200,000 to analyze all of the assets that comprise Providence Water, including the 37-billion gallon reservoir in Scituate, 27 square miles of watershed property, all the water mains and pipes in the distribution system, more than 6,000 fire hydrants and a water treatment facility.

The \$404.2-million figure is based on the firm's analysis of what it would cost to develop a new water system or rebuild the existing one. Other methods considered by the firm turned up lower values, including \$317.2 million if the value was based on the original acquisition costs of the assets and \$327 million if the value was based on four comparable transactions over the last three years.

Providence leaders have been trying to find ways to profit from the water supply for several decades, but their efforts have been stymied by legal questions about who actually owns the system and legislative opposition.

In 1994, then-Mayor Vincent A. "Buddy" Cianci Jr. attempted to sell the system to the Narragansett Bay Commission for \$500 million, but the deal fell through. In 2008 the city again considered a sale, with City Council members telling The Providence Journal at the time they believed Providence could receive a one-time payment of between \$400 million and \$600 million to help the pension fund.

During a trial involving a lawsuit that challenged Providence's pension changes in 2013, former Mayor Angel Taveras testified that he <u>didn't believe the city could benefit from the sale of the water system (http://wpri.com/2016/04/19/in-providence-pension-trial-former-mayor-taveras-defends-changes-to-retiree-benefits/)</u> because the proceeds would need to be returned to ratepayers.

Elorza, who is planning to run for re-election next year, said he's seeking a "once and for all" solution to the city's pension challenges.

"The best time to have done this was probably 20, 25 years ago," he said. "The second-best time to do it is now."

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Dan McGowan (dmcgowan@wpri.com (mailto:dmcgowan@wpri.com)) covers politics, education and the city of Providence for WPRI.com. Follow him on <u>Facebook</u> (https://www.facebook.com/groups/PVDpolitics/) and Twitter: @danmcgowan (https://twitter.com/danmcgowan)





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Tunneling 200 Feet Underneath Connecticut For Cleaner Water, At A Cost

By PATRICK SKAHILL (/PEOPLE/PATRICK-SKAHILL) • NOV 7, 2017

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MDC Project Manager Brian McCarthy, left, on the site of construction for the South Hartford Conveyance and Storage Tunnel. The project will install a giant underground system for treating stormwater runoff. Engineers expect it to be online in 2023.

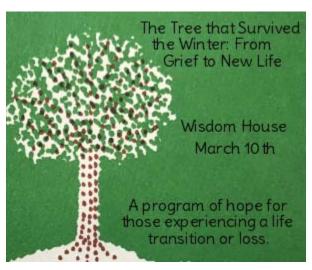
PATRICK SKAHILL / WNPR



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A giant, miles-long tunnel is about to be drilled hundreds of feet beneath Connecticut's capital. This subterranean project will take years, cost hundreds of millions of dollars, and the hope is, result in cleaner water for the Connecticut River and Long Island Sound.

The size is impressive. About 200 feet below ground will lie a tunnel, 18 feet in diameter that's drilled through rock -- and extending about four miles.

Overlooking a giant shaft in Hartford that's getting deeper and deeper -- Susan Negrelli, director of engineering for the Metropolitan District, which oversees water for the region, said pretty soon, a giant drill will make its way underground -- followed by tons and tons of machines.

"It's a small city that you put down there in the tunnel. It has to have its own air, its own clean water, its own dirty water," Negrelli said. "There's electricity. Hydraulics."

Negrelli spoke on the construction site for The South Hartford Conveyance and Storage Tunnel (http://www.thecleanwaterproject.com/project-programs/south-hartford-conveyance-storage-tunnel). At an estimated cost of \$500 million, it's the biggest project the MDC has ever done.

As we talk, that giant drill sits behind us. Brian McCarthy, project manager for MDC, said its journey will take it west out of Hartford -- burrowing underground beneath highways and roads until it gets to its endpoint one town over.



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Attached to the tunnel boring machine will be a "cutter head," which will be instrumental in moving the rock required to make a massive tunnel 200 feet below Hartford's surface.

CREDIT PATRICK SKAHILL / WNPR

"We think once we get in the ground, and actually start churning, it will probably take around 18 months or so for that journey to happen," McCarthy said.

The tunnel's goal? To eliminate sewer overflows.

These overflows happen when there's a lot of rain. Sewers built as far back as a century ago can get overwhelmed, and rainwater can mix with sewage from toilets and baths.

To avoid that sewage flowing back into homes and businesses, older systems outlet directly into places like the Connecticut River.

That's a major water pollution concern, one the EPA said plagues hundreds of U.S. cities (https://www3.epa.gov/region1/eco/uep/cso.html).

But the Clean Water Act is working to change that. In the decades since becoming law -- it's forced many cities to reduce or eliminate those sewage overflows.

Negrelli said Hartford's tunnel, which will be funded by the state and ratepayers, is in direct response to the Clean Water Act. The tunnel will catch problematic storm overflows, treat them, and release the cleaned-up water.

That, she said, will help suburban towns.

"Ultimately, when finished, it will permanently eliminate overflows to the Wethersfield Cove, control other overflows that we have in our sewer system to a one-year level of control, and eliminate some of the sanitary sewer overflows that we have out in the West Hartford, Newington area," Negrelli said.



(http://mediad.publicbroadcasting.net/p/wnpr/files/styles/x large/public/201711/20171020 10

Attached to the boring machine will be a train of "trailing machines," which will help move materials into and out of the tunnel and ensure that workers have adequate life support.

CREDIT PATRICK SKAHILL

"All of our stormwater runoff and all of our sewage is contributing to the problem," said Anne Jefferson, an associate professor at Kent State University who studies watershed hydrology. "So it's not as easy as cleaning up industrial operations in one factory. We really are now talking about the urban fabric of the city."

"These tunnels are expensive. These tunnels are big infrastructure. They're big engineering. They're what we call a gray' approach," Jefferson said.

She said tunnel projects like Hartford's can be found up and down the east coast. Old industrial sites, where engineering decisions were made long ago, that need to be fixed today.

The Narragansett Bay Commission (https://www.narrabay.com/)'s Jamie Samons, said that

was the case in Providence, Rhode Island. Her group completed a tunnel there in 2008.

"Underground construction is always complicated and it can be expensive, but when you're in a very highly developed urban environment -- sometimes it's just more convenient," Samons said.

Still, it cost a lot -- about \$360 million. And she said it meant they had to raise sewer rates for their customers.

"In 2001, the annual average single family dwelling paid about \$135 a year for their sewer service," Samons said. "Now they pay \$500. So rates have gone up substantially to pay for this project."

Samons said the tunnel did yield results. She said it kept billions of gallons of dirty water from going into Narragansett Bay. It's led to fewer beach closures, and restored shellfish beds in the area.

Still, the tunnel idea seems to be up for debate. Samons said her group was planning to dig another one. But right now, it's not sure it can afford the estimated \$750 million price tag.

So they're open to other ideas.

"Will we receive a larger bang for our buck in water quality if we spend it somewhere else?" Samons said. "Like, on habitat re-establishment, or on nutrient reduction, or stormwater abatement?"

Anne Jefferson from Kent State said each city faces a unique set of sewer problems. But for some, "green" approaches may be the way to go -- doing things like building rain gardens or detention ponds.

"But there is certainly resistance to that. There's a lot of concerns among engineers and maintenance crews -- are these things going to be harder to maintain?" Jefferson said.

Then there's the unpredictability of giant tunnels. Jefferson said they're built for a fixed volume today, which could ignore urbanization or climate change -- that could make more water flow, tomorrow.

Hartford's tunnel is expected to be online in 2023.

TAGS: ENVIRONMENT (/TERM/ENVIRONMENT-1) WATER (/TERM/WATER)



Grenville Ave. sewer, water project delayed

Johnston Sun Rise (/johnston-trending/) · Friday, November 10, 2017

According to Jamie Samons, public affairs manager at the Narragansett Bay Commission, the sewer and water line extension project on Greenville Avenue is behind schedule. The limitations on blasting through the ledge, which have generated concerns about gas hookups to residences, have put the project behind, and the completion date has been extended to December.

In the meantime, the sewer trench work between Golini Drive and Celebration Way will not be backfilled daily, but instead covered with steel plates placed on top of the trench boxes. The trench is approximately 20 feet deep in this area. The excavation will have jersey barriers surrounding the trench and two police cruisers posted at each end to monitor through the night, and will still get backfilled on weekends and holidays. One lane of traffic will be opened during this time.

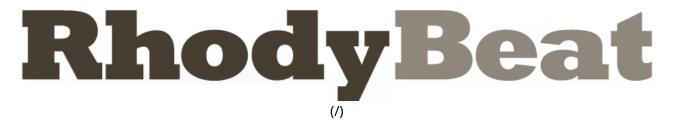
In addition, now that daylight is limited, light towers will be used as well for work crews.

This story was originally posted by Johnston Sun Rise. Click here (http://johnstonsunrise.net/stories/grenville-ave-sewer-water-project-delayed,129302) to view the original story in its entirety.

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Residents, businesses hope for quick end to sewer project

Johnston Sun Rise (/johnston-trending/) · Thursday, November 16, 2017

By Tim Forsberg

The announcement last week by the Narragansett Bay Commission that the sewer and water line extension project currently taking place on Greenville Avenue was behind schedule was hard to take for some residents.

"It's taking forever and it's a huge inconvenience. I feel so sorry for the people who live in the area," wrote Pat Senecal Muscatelli on the Johnston Sun Rise Facebook page.

"I never know which way I can go home, get home, if I'll be delayed, how people can get to my house, what bull!" wrote Julie Francis. "These roads are awful."

While residents have been inconvenienced, businesses in the area have struggled to bring in customers through the construction zone.

Lisa Baillargeon, owner of Fabulocity at 269 Greenville Avenue, has been in business since August 2011. Her upscale consignment and fine gift emporium was originally opened in Smithfield around the corner from TJ Maxx. Lisa then moved her business to its current location in May.

"It's been difficult," she said. "Right now we're just trying to look at the bright side that we'll have an exit off 295 once this is over and that not everyone is going to be taking the 295 exit. There's going to be people coming from Killingly Street and driving right past here to get to Citizens. Prices are double in Smithfield, so we'd really like to stay here."

Living in North Smithfield, Lisa went to Boston for college and law school and lived for three years in New York City working in design. She's an inactive attorney and, after a car accident in 2002 that damaged her neck and spinal column, she decided to change her life. Later diagnosed with Lyme disease, the mother of three sons aged 14, 11 and 7, Lisa resolved to take her family in a different direction.

"The store is my sanctuary. I call this my 'mommy track job.' This is my self-assigned mommy track position. It's a busy schedule," she said. "I thought that this could be something that I could keep mother's hours. I have two part-time employees that make that possible."

While a consignment shop, one-third of the store merchandise is new product with a heavy focus on gifts and designer clothing. The store also carries humorous and novelty items. The store also accepts and purchases clothing that's two to three years old from customers. Lisa said that customers visit the store to find designer clothing and brands found at areas like Garden City shops, without having to pay the higher prices found there.

Fabulocity also has an "Acre of Prom," a mix of consigned gowns and also ones brought in from wholesalers in Dallas and New York, for teens and black tie events for adults. Prices depend on the brands, with some dresses starting at \$50.

With jewelry items, designer handbags, fine clothing, along with items that would be considered conversation starters, her store if filled with fun and unique things for all tastes. While she recognizes the need for change, she hopes that the construction project won't suffer further setbacks.

"Everyone has been very friendly," said Lisa about working with officials in town. "Most of my customers were happy that we are still around, that it's only about six minutes from our old store without the construction."

She's worked through inconveniences such as construction and electrical trucks parked in the store's lot, along with road closures. But Lisa said she appreciates her customer's patience with the construction and is hopeful for a bright holiday sales season.

"Every possible challenge that could have been thrown at us has been thrown at us," she said. "The bright side is I have a lovely landlord; they refer as many customers over to us as they can. We're trying to make it work here."

Fabulocity is open Tuesday, Wednesday and Friday from 11 a.m. to 6 p.m., Thursday from 11 a.m. to 7 p.m. and Saturday from 10 a.m. to 4 p.m. For more information visit their website at www.fabulocityri.com.

This story was originally posted by Johnston Sun Rise. Click here (http://johnstonsunrise.net/stories/residents-businesses-hope-for-quick-end-to-sewer-project,129490) to view the original story in its entirety.

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11/21/2017

Stamp Farms coping as Greenville Ave. project hits ledge



Greenville Avenue is open to local traffic only, which has caused a decline in customers to Stamp Farms on the Johnston/Smithfield line. The conclusion of hte project has been delayed to December. (Breeze photos by Ethan Shorey)

By ETHAN SHOREY, Valley Breeze Managing Editor

JOHNSTON – A hand-drawn picture of a chicken just inside the front door of Stamp Farms offers a sarcastic take on a classic joke:

"Why did the chicken cross the road?"

Answer? "To try to get away from the construction."

The truth is that incessant and often unpredictable construction along Greenville Avenue has been no joke for the family-owned egg farm, which traces its roots back to the 1930s, nor can the people and chickens on the property get away from it.

Though most of Greenville Avenue is residential, Stamp Farms, at 816 Greenville Ave. on the Smithfield town line, has the unfortunate task of doing business just a few feet inside the road's construction zone. That zone is going to last a bit longer than originally thought, say officials. Work that began in early April will be extended at least another month due to:

- The depth and amount of ledge workers have encountered underground.
- And the close proximity of residential gas hookups.

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"Originally, we planned to blast through much of the ledge, but the location of the gas hookups makes blasting unadvisable," said Jamie Samons, public affairs manager for the Narragansett Bay Commission. "Therefore, the crews are hammering through the rock. Hammering takes longer than blasting, but offers more finesse in the rock removal process. Ultimately, it's a safety issue."

As anyone who's had work done on their house knows, "even the best planned projects can run into issues and delays," said Samons. "We're working to minimize these as much as possible,

and we are still confident that the project will be a great benefit to the area."

Nathan Fields, an employee at Stamp Farms, said business was really struggling before officials put up signs along the route from Exit 7B on Route 295 to notify customers that they are still allowed to access Route 5 Greenville Avenue to get to the egg farm.

"Without those signs it was just a ghost town around here," he said.

Owner Bob Stamp said his chicken farm is making it through, in part because of a good wholesale business for the eggs laid by some 3,000 chickens. The opening of a new exit off Route 295, the future Exit 10 designed to accommodate the new Citizens Bank corporate headquarters up the street, should bring a lot of new traffic to the area, which will be a welcome development, he said.

"I hope at least 50 percent of it stops and buys a dozen eggs at Stamp Farms," said Stamp, laughing.

The new corporate campus is expected to house more than 3,000 employees and cover 420,000 square feet.

The Valley Breeze & Observer reported in August that the Greenville Avenue utility work was on schedule for completion in November, and Samons said in early October that the project could be done earlier than originally expected, but she said the job now isn't going to be substantially complete until sometime in December.

The Narragansett Bay Commission is installing some 7,000 feet of new sewer pipe from Salina Avenue to about 1,000 feet west of I-295 in Johnston to service the new Citizens Bank corporate

headquarters. The significant undertaking requires construction Monday to Friday, and Greenville Avenue is blocked off except to local traffic.

Blockades and signs have caused a significant inconvenience for the many residents in the neighborhood and the few business owners in the area.

Bob Stamp said a barbershop in the area has also been impacted, but because the owner does haircuts by appointment, the hit from the construction project hasn't been as hard as on a business that depends on more regular visits.

Detours will remain the same throughout the construction, with restrictions between Pine Hill and Smokey, and at Golini Drive and Roger Road, said Samons. There is, however, other utility work in the area (Providence Water and National Grid) that may cause detours unrelated to the NBC project, said Samons.

When construction finishes up in December, NBC will then temporarily pave to allow the ground to settle, said Samons. Workers will be back briefly in the spring for final, curb-to-curb paving.

The project brings the following upgrades for residents, said Samons.

Sewer:

- The assessment fee will be waived for residential and business hookups along Greenville Avenue. No one is forced to hook up to the sewer.
- Stub lines will be available to adjacent streets, so the town may hook up in the future if desired.

Water:

- There will be improved reliability and modernized infrastructure.
- An existing eight-inch asbestos cement water pipe will be replaced with modern 16-inch ductile iron pipe.
- The water supply piping will be extended beyond the current service area.
- There will be upgrades to an existing pump station.
- And a new 1 million-gallon water storage tank will go online.



Nathan Fields, of Stamp Farms in Johnston, places letters advertising Wright's Dairy Farm eggnog at the front of the farm property last Saturday. Stamp Farms has lost plenty of business during the Greenville Avenue water and sewer project, which has seen another delay.

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THE BEST EGGS

Permalink | Submitted by maxitaxi72 on Wed, 2017-11-22 22:28

And I wonder what Gina can do for the SMALL BUSINESS? This is a great family business that just didn't just fall from the sky. I'll see you guys next week. And I will pick up my eggnog. No CRAINS IN GREENVILLE

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INCONVIENCE

Permalink | Submitted by Muffy12855 on Mon, 2017-11-27 10:59

even though they say the road is open to local traffic that is not true..residence are not let through to get to their homes and are forced to go all the way around...the wear and tear on our vehicles is unreal..I understand this is "progress" but unless you live on Greenville Ave. and are impacted by this project you have no idea what we are going through...there is no sleeping in

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NBC provides updates on 'Big Digs'



(/uploads/original/1492096077_5253.jpg)

Posted Thursday, November 30, 2017 2:14 pm

By Tim Forsberg

Johnston's "Big Dig" sewer and water extension projects on Greenville Avenue and Hartford Avenue are tentatively slated to be completed by the end of the year, according to the Narragansett Bay Commission (NBC).

After announcing earlier this month that the Greenville Avenue project suffered setbacks because of the amount of ledge discovered under the current section under construction, along with residential gas hookups that were nearby to the construction area that prevented blasting, work appears to be moving on schedule.





(http://www.rijobs.com)



(http://warwickonline.ads.communityq.com/oaparams=2__bannerid=450__zoneid=20_3A%2F%

2Fwww.warwickonline.com% 2Fstories%2FWeb-Advertisingwith-Beacon-Communications% 2C90109%3Fsearch_filter% 3D90109%26content_class% 3D1%26town_id%3D1% 26sub_type%3Dstories) According to Jamie Samons, Public Affairs manager with NBC, work on both projects is expected to be finished in December, barring any unforeseen circumstances such as a blizzard or weather event, though an exact completion date is not yet known.

Greenville Avenue still remains partially closed to traffic, with the same detours having been in place for the last month or so. The trench on Greenville Avenue, currently encompassing the deepest part of the construction project, is not being backfilled daily but covered with metal plating to speed up work.

Samons stated that she has heard complaints from residents about the delay and traffic patterns, but that the actions taken are designed to improve safety.

"We've heard it, too. All of that stuff is really driven by safety. We trust the judgment of the police on what is safe to do and what is not safe to do," said Samons of the Greenville Avenue project. "I've heard some complaints from neighbors as well and I understand that it is incredibly inconvenient for them, but this is construction."

Currently, just over 9,000 linear feet of 16-inch water pipe has been laid under Greenville Avenue, and there is just under 1,000 feet of sewer lines left to install. Di Gregorio currently has three work crews working on the project. Once completed, a temporary paving will be installed for the winter, and the roadway will be permanently paved in the spring.

On Hartford Avenue, 4,046 linear feet of 12-inch PVC gravity sewer lines have been installed of the projected 5,400 linear feet of piping needed. D'Ambra, the contactor, also won the Department of Transportation bid for paving in the spring, which NBC believes will provide for a smooth coordination between sewer installation and final paving.

"As always, we really appreciate everyone's patience with this, it's been a complicated job but we're still confident that, when it's complete, it will really be a benefit for the area and we're anxious to have it done," said Samons.



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Sunday | New Date- 14th Annual Polar Plunge benefiting A Wish Come



Fishermen: Bay cleanup might be doing harm

By Alex Kuffner Journal Staff Writer kuffneralex

Posted Dec 6, 2017 at 11:24 PM Updated Dec 6, 2017 at 11:24 PM

NARRAGANSETT — Narragansett Bay is cleaner and clearer than it's been in decades.

But after huge strides in treating wastewater and controlling storm runoff, some are asking a question that would have been unthinkable just a few years ago about what is arguably Rhode Island's most valuable natural resource:

Is the Bay too clean?

Fishermen are raising the issue after seeing steep declines in numbers of flounder, lobster and other species that were once so abundant that they formed the bedrock of their industry.

It has gotten bad enough that lobsterman Al Eagles says that he and others now call the Bay "Chernobyl," a reference to the site of the devastating Soviet-era nuclear disaster.

"We have to ask ourselves, 'What is taking place in the Bay that has changed it from a resilient bay to a dead bay?" Eagles, who has fished for 45 years, said Wednesday at an annual marine affairs forum held at the University of Rhode Island.

Lanny Dellinger, board member of the Rhode Island Lobstermen's Association, put the blame on a tightening of restrictions on wastewater treatment plants after the historic Greenwich Bay fish kill in 2003 that over the past 10 years or so has cut in half the amount of nutrients that flows into the Bay.

"It seemed to be happening in sequence with the timing of nitrogen reductions," Dellinger said, pointing out that such nutrients are key to the growth of phytoplankton, a critical food source for marine life. "I used to see unbelievable amounts of life, but I started to see that change in the mid-2000s."

The men spoke at the 16th annual Ronald C. Baird Sea Grant Science Symposium at URI's Graduate School of Oceanography in Narragansett, an event aimed at fostering discussion and developing research projects. Bruce Corliss, dean of the school, said he chose to focus on questions about the Bay's health after a conversation with Eagles.

Not everyone at the event agreed with the fishermen's contention. Tom Uva, of the Narragansett Bay Commission, which operates the largest wastewater treatment system in Rhode Island, showed video clips of tautog, northern sea robin and Atlantic menhaden swimming through the Providence River.

"The Bay is alive. It's not sterile," said Uva, director of policy, planning and regulation at the commission.

But the diversity of its life is changing, as it always has. Narragansett Bay had a salmon fishery until the 1870s after its tributaries were dammed by industrial mills. Wild oyster beds were depleted by disease in the early 1900s and finished off by the Hurricane of 1938. The bay scallop industry collapsed in the 1930s after a slime mold outbreak and disappeared completely in the 1960s with the death of large eelgrass beds.

Winter flounder populations have been dropping since the 1990s and lobster numbers since the early 2000s, well before the new regulations for treatment plants came into play.

And nutrient levels today are still markedly higher than they were in pre-Industrial Revolution days when the Bay was more pristine. Levels of nitrogen and phosphorous spiked in the late 19th century after Providence first started discharging sewage into the Bay and continued to increase through the 1960s with a rising population, said Boston University professor Robinson W. Fulweiler.

"The level of productivity, that's almost an artificial result, because it's from our fertilization,' she said.

Fulweiler also bucked the notion that the new wastewater regulations are solely responsible for the recent changes to marine life. The causes are more complicated.

Climate change is undoubtedly a driving factor. Rising water temperatures are pushing cold-water species such as lobster out of Rhode Island waters. Warmer waters are also inhibiting winter algae blooms, leaving less food to drift down to bottom-dwelling species.

But not all marine animals are suffering. The ones that live on the Bay floor as a whole are faring poorly, but fish that live higher in the water column, such as scup, butterfish and squid, are doing well. Farmed oysters are also thriving.

"It's like we're seeing the exact opposite," Mason Silkes, of aquaculture operation Saltwater Farms, said, comparing his experience with those of Dellinger and Eagles.

There are larger questions in play, said Janet Coit, director of the Rhode Island Department of Environmental Management.

"Given the complexity of everything that's going on, what are we trying to get to?" she asked.

Fishermen: Bay cleanup might be doing harm - News - providencejournal.com - Providen... Page 3 of 3

What's the right level of nutrients in Narragansett Bay?

"We don't know," said URI professor Candace Oviatt. "The Bay is always changing. Every year is different. Whether we like it or not, the Bay is going to keep changing."

Whatever the reason for the changes and the goal moving forward, the outlook is bleak for those fishermen that once depended for their livelihoods on species that are no longer abundant in the Bay.

"I'm afraid we're going to lose our fishing heritage in Rhode Island," Dellinger said. "If you're looking at a fisherman, you're looking at an endangered species."

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Opinion

My Turn: Jonathan Stone: Narragansett Bay is far from 'too clean'

By Jonathan Stone

Posted Dec 13, 2017 at 4:52 PM Updated Dec 13, 2017 at 4:52 PM

On Dec. 6, the University of Rhode Island hosted the annual Ronald C. Baird Sea Grant Science Symposium, which provided a comprehensive look at the health of Narragansett Bay and numerous insights into changes that have occurred in recent years, and stretching back to the 1700s.

Lest anyone misinterpret The Providence Journal's Dec. 7 headline ("Fishermen: Bay cleanup might be doing harm"), or fail to read the entirety of the article, rest assured that that Narragansett Bay is not "too clean." The contention that the Bay is being starved for nitrogen and, as a result, becoming an ecological desert, is simply not accurate.

To begin with, the Bay was highly productive long before the City of Providence began discharging sewage (and vast quantities of nitrogen) into the Bay in the 1870s, and remains so today. Even after the reductions in nitrogen loads from wastewater treatment plants, nitrogen inputs from all sources far exceed loads to the Bay 150 years ago.

The 60 percent reduction in nitrogen loads achieved by the Narragansett Bay Commission and other wastewater treatment plant operators in Rhode Island and Massachusetts has yielded important environmental and economic benefits. A recent technical report from the Narragansett Bay Estuary Program ("The State of Narragansett Bay and Its Watershed") documents that reductions in nitrogen loads have led to improving water quality and benthic (bottom) habitat conditions. While two primary indicators of biological productivity — chlorophyll and phytoplankton — have decreased, the biological productivity of the Bay, especially the upper Bay, remains high.

Quahoggers and oyster farmers report rapid rates of growth for shellfish in the Bay. And various measures of biological productivity observed in long-term plankton and fish trawls and at monitoring stations indicate that the Bay remains highly productive, despite the recent reductions in nitrogen loads. A cleaner Bay has resulted in the permanent opening of shellfish beds that had been conditionally

closed for decades and may soon lead to the opening of beaches in East Providence to public swimming. The cleanup of the Bay is a national success story and an achievement of which all Rhode Islander's should be proud.

While the Bay is not too clean, both Bay researchers and the fishing community agree that many changes are occurring.

The reasons for these changes are complex, to say the least. Many factors complicate the efforts of scientists to tease apart cause and effect. The abundance of a given species of fish, for example, is subject to annual variations that may relate to spawning conditions, ocean currents, weather, changes in food sources, changes in predator populations, disease, commercial and recreational fishing pressures, local habitat conditions, etc. Over longer time scales, these factors are themselves influenced by climate change, pollution, habitat loss, and other conditions. The collapse of the lobster fishery in Rhode Island waters is, no doubt, caused by many of these factors in combination.

Climate change is the proverbial "elephant in the room" in understanding how the Bay has changed and is likely to change in the future. An important challenge for everyone who cares deeply about the Bay is to devise strategies to help the Bay ecosystem adapt to rapid climate change.

Pollution — including excessive nitrogen loads — is a major stressor of habitat quality and biodiversity that are essential to the health of the Bay. It is imperative that we reduce all pollutants that affect Bay health if we are to preserve the productivity and resilience of the Bay in the years to come.

Jonathan Stone is executive director of Save The Bay.



MOST POPULAR STORIES

NBC PRESS RELEASES AND PUBLIC NOTICES

NARRAGANSETT BAY COMMISSION

Perfect Compliance

in recognition of Significant Industrial User Perfect Compliance in 2016

The Narragansett Bay Commission recognizes these Significant Industrial User companies for perfect regulatory compliance with Pretreatment Program regulations during 2016:

A. Harrison & Company, Inc.
Dominion Energy
Manchester St., Inc.
Induplate, LLC
Liquid Blue
Mahr Federal, Inc.
Providence Metallizing
Company, Inc.

Tanury Industries PVD, Inc. Truex, Inc. Alloy Holdings, LLC
Electrolizing, Inc.
Godfrey & Wing, Inc.
International Chromium Plating
Interplex Engineered Products, Inc.
Providence Journal Company Production Facility
Stackbin Corporation
Technodic, 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.

Univar USA, Inc.

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

The Narragansett Bay Commission

PUBLIC NOTICE



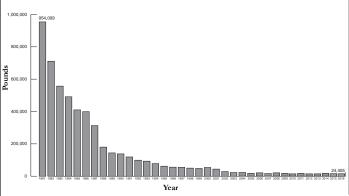
Firms in Significant Non-Compliance

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGULATION 40 C.F.R. 403.8(f) (2) (vii) and Article 10 of the Narragansett Bay Commission, Rules and Regulations require the NBC to publish annually the names of all industrial users in Significant Non-Compliance (SNC) with pretreatment standards and other pretreatment requirements during the preceding year. Companies deemed to be in Significant Non-Compliance are those industrial users who have violated any of the Significant Non-Compliance criteria listed, as defined by Article 2 of the NBC Rules and Regulations during the time period from October 1, 2015 through December 31, 2016. 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, 1981-2016



HE NARRAGANSETT BAY COMMISSION IS COMMITTED TO PROTECTING THE STATE'S TWO LARGEST WASTEWATER TREATMENT FACILITIES AND NARRAGANSETT BAY FROM TOXIC DIS-CHARGES. 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 97.4% and 98.7% 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
Putnam Holdings, Inc.	Failure to submit reports on time (6)	Reports have not been received.
Pawtucket		
Ecological Fibers, Inc.	Zn (2)	Firm is now in compliance.
Rand Whitney Southeast Container, LLC	Cu (2)	Firm is now in compliance.
Bliss Manufacturing Company, Inc.	CN (2)	Firm is now in compliance.
Microfibres, Inc.	Failure to submit reports on time (6)	Firm is out of business.

Company Name	Violations Cited	Present Status
Eastern Screw Company	O&G (2)	Firm is now in compliance.
KB Surfaces	Failure to submit report on time (6)	Report has been received.
North Providenc	е	
DFI-EP, LLC	Cr (2), CN (2), Ni (2)	Firm is now in compliance.
Providence		
Providence Specialty Products	O&G (1, 2)	Firm is now in compliance
	Failure to submit report on time (6)	Report has been received.
IC Gorham Co.	Failure to submit report on time (6)	Reports have not
JC Gornam Co.	•	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 • Instagram: @narrabay

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

Narragansett Bay Commission Receives National Audit Award

Post Details

Posted March 28, 2017 Filed under **General**

Narragansett Bay Commission Receives National Audit Award

The Government Finance Officers Association of the United States and Canada (GFOA) has awarded the Narragansett Bay Commission (NBC) with a Certificate of Achievement for Excellence in Financial Reporting for its fiscal year 2015 audit, marking the fourteenth consecutive year the NBC has received the award.

"The award reflects the commitment of the NBC's Board of Commissioners and staff to meet the highest principles of financial management," said NBC Chairman Vincent Mesolella. Of chief importance is the ability of the audited reports to meet the needs decision-makers and citizens.

The GFOA established the Certificate of Achievement for Excellence in Financial Reporting Program (CAFR Program) in 1945 to encourage and assist state and local governments to go beyond the minimum requirements of generally accepted accounting principles to prepare comprehensive annual financial reports that evidence the spirit of transparency and full disclosure and then to recognize individual governments that succeed in achieving that goal. The goal of the program is not to assess the financial health of participating governments, but rather to ensure that users of their financial statements have the information they need to do so themselves.

With the completion of fiscal year 2016, the NBC also marked its twenty-fourth year under budget. In addition, the Standard & Poor's Rating Service reaffirmed its A+ rating for the Narragansett Bay Commission.

Greenville Avenue Closure to Begin Monday, April 10

Post Details

Posted April 05, 2017 Filed under **General**

Greenville Avenue Closure to Begin Monday, April 10

The Narragansett Bay Commission's sewer construction in Greenville Avenue in Johnston will begin on Monday, April 10, weather permitting, lasting until November 2017. During the construction period, Greenville Avenue will be open to local traffic only. The project will add 7,000 linear feet of new sewer from Salina Avenue to approximately 1,000 feet west of I-295 and will upgrade water service in the area.

Electronic message boards and detour signs will direct traffic to alternate routes. A police traffic detail will and NBC's inspectors will be on site during all working hours.

In order to minimize construction duration and limit disruption, the Town of Johnston has approved extended working hours from 7AM to 10PM Monday – Saturday. There will be no blasting or mechanical rock removal after 5PM.

Greenville Avenue will be open only to:

- Local residents on Greenville Avenue and side streets
- Schools buses, emergency vehicles, mail carriers, and trash/recycling collection
- Access to driveways will be maintained

For more information about the project, please visit the presentation on the Narragansett Bay Commission's website, www.narrabay.com. Other inquiries may be directed to the NBC's Public Affairs Department at (401) 461-8848. In the event of an after-hours emergency, the NBC may be reached at (401) 222-6781.



For Immediate Release May 17, 2017

Contact: Cynthia Morissette

Public Affairs Office

Narragansett Bay Commission

(401) 862-5898

Cynthia.Morissette@narrabay.com

Record Number of Junior Scientists Convene to Showcase Year-long Work

On Friday, May 19, 2017 from 10:00 a.m. to 1:00 p.m., over 700 elementary school students, teachers, and guests from twelve Rhode Island schools will gather at Goddard Park in Warwick for an environmental education conference to culminate the Narragansett Bay Commission's (NBC) Watershed Explorers program.

The NBC Watershed Explorers program is an award-winning hands-on water quality monitoring program that educates students and teachers in and out of the classroom about the health of their local watershed areas. The goal of the NBC Watershed Explorers is to promote advocacy by helping participants to build a relationship with each component of their watershed.

Students from the Paul Cuffee School and Meeting Street School in Providence, Sarah Dyer Barnes Elementary School in Johnston, Anna McCabe Elementary School in Smithfield, Kent Heights Elementary School and Orlo Avenue in East Providence, Agnes Little Elementary School and St. Cecilia School in Pawtucket, Centredale Elementary in North Providence, Chester Barrows School in Cranston, Saylesville Elementary in Lincoln, and Ashton Elementary School in Cumberland all participated in the NBC Watershed Explorers program this year.

These twelve schools will join NBC staff, and staff from Biomes Marine Biology Center, Save the Bay, the Aububon Society of Rhode Island, Roger William's Park Zoo, the New England Aquarium, and the Woonasquatucket Watershed Council for a day of environmental education activities.

The day will begin by welcoming guest speaker, Abby Abrahamson, an ambassador from Jane Goodall's Roots and Shoots National Youth Leadership Council. Ms. Abrahamson will discuss her work with Roots and Shoots, focusing on the importance of youth advocacy for the environment. After Ms. Abrahamson's address, one group from each school will perform a song, skit, or rap about a local macroinvertebrate. The day will culminate with the young scientists participating in some fun and informative environmental education activities.

"The Watershed Explorers at Agnes Little Elementary School in Pawtucket have had an incredible year under the guide of Cynthia Morissette. The planned in-class activities and field trips helped them learn the importance of their watershed and how to make educated decisions regarding the environment and the wildlife within it." –Grade 3 Teachers Agnes Little Elementary

Heather Engstrom a grade 5 teacher at Chester Barrows Elementary in Cranston notes, "The NBC Watershed Explorers Program is a wonderful, hands-on learning experience for my 5th graders. They were able to showcase their talents in the many activities and projects throughout the year. This is a great addition to any science curriculum."

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

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http://www.narrabay.com

For Immediate Release May 17, 2017



Vincent J. Mesolella Chairman

Raymond J. Marshall, P.E. Executive Director

Contact:

Jamie Samons, Public Affairs Manager

(401) 935-5030 (cell) jsamons@narrabay.com

WASTEWATER TREATMENT FACILITIES TO HOST PUBLIC TOURS AS PART OF WASTEWATER APPRECIATION DAY

Facilities Seek to Raise Awareness About the Systems that Protect Public Health and the Environment and Support Economic Development

PROVIDENCE — Governor Gina Raimondo has proclaimed May 20th "Wastewater Treatment Appreciation Day" in recognition of the critical role wastewater collection/treatment systems and the people who operate them play in protecting public health and supporting economic prosperity in Rhode Island and two wastewater treatment facilities will open their doors for public tours this Saturday. The tours, often reserved for students and public officials, will offer a first-hand look at these multi-million dollar facilities, and provide the opportunity to get to the know the Rhode Island men and women that run them. In total, Rhode Island's wastewater treatment systems purify and discharge about 120 million gallons of raw sewage every day.

Tours will be held this Saturday, May 20th from 10 a.m. to 2 p.m. at:

- Narragansett Bay Commission Fields Point Wastewater Treatment Facility located at 2 Ernest Street in Providence. Field's Point is the largest treatment facility in Rhode Island and the 3rd oldest in the nation. Come see this technologically-advanced and wind-powered facility. Extra credit certificates will be available for students taking a facility tour and refreshments will be on hand for all visitors.
- City of Warwick Wastewater Treatment Facility located at 125 Arthur W. Devine Boulevard in Warwick. Warwick's facility is mid-sized and relatively young, first treating wastewater from industrial and older residential areas of the City in April, 1965. The City continues to grow its collection area and improve its treatment facility with recently completed new phosphorus removal process and flood levee improvements. For questions about facility accessibility, please contact Superintendent Scott Goodinson at 401-302-0307.

The tours were organized and are being sponsored by the Narragansett Water Pollution Control Association and the New England Water Environment Association to highlight the often hidden community assets that play a critical role in protecting public health and the water environment and promoting economic prosperity.

-###-

Greenville Avenue Construction Extends to Salina on May 30

Post Details

Posted May 26, 2017 Filed under **General**

Greenville Avenue Construction Extends to Salina on May 30

The Narragansett Bay Commission's sewer construction in Greenville Avenue in Johnston will extend to the area adjacent to Salina Avenue on Tuesday, May 30, weather permitting. During the construction period, Greenville Avenue will be open to local traffic only. The project is adding 7,000 linear feet of new sewer from Salina Avenue to approximately 1,000 feet west of I-295 and will upgrade water service in the area.

Electronic message boards and detour signs will direct traffic to alternate routes. A police traffic detail will and NBC's inspectors will be on site during all working hours.

In order to minimize construction duration and limit disruption, the Town of Johnston has approved extended working hours from 7AM to 10PM Monday – Saturday. There will be no blasting or mechanical rock removal after 5PM.

Greenville Avenue will be open only to:

- Local residents on Greenville Avenue and side streets
- Schools buses, emergency vehicles, mail carriers, and trash/recycling collection
- · Access to driveways will be maintained

For more information about the project, please visit the presentation on the Narragansett Bay Commission's website, www.narrabay.com. Other inquiries may be directed to the NBC's Public Affairs Department at (401) 461-8848. In the event of an after-hours emergency, the NBC may be reached at (401) 572-3142.

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

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http://www.narrabay.com



Vincent J. Mesolella Chairman

Raymond J. Marshall, P.E. Executive Director

Media Release

For immediate release August 30, 2017

Contact: Jamie Samons, Public Affairs Manager

401- 461-8848, ext. 377 Cell: 401-935-5030

Bay Commission Embarks on Historic Renewable Energy Project

The Narragansett Bay Commission (NBC) has signed an agreement with Green Development, Inc. (formerly Wind Energy Development, Inc.) to construct two solar energy farms to enhance the NBC's sustainable energy portfolio. The two solar projects, a 4.24 MV array in Coventry, Rhode Island, and a 5.45 MW array in Richmond, RI, will complement the NBC's six existing 1.5 MW wind turbines.

Over twenty-five years, the solar projects will save over \$18 million in electric costs from selling renewable energy credits and offset an estimated 110,092 metric tons of carbon dioxide equivalents.

The NBC Board of Commissioners approved the project at their March 2017 meeting, in keeping with the NBC Chairman Vincent Mesolella's commitment to pursue full reliance on renewable forms of energy by 2020. After extensive review and evaluation by NBC staff and an independent expert, Green Development, Inc., based in North Kingstown, RI, was determined to have a superior submission in a competitive request for qualifications and proposal (RFQ/P) process.

The NBC is able to receive benefits from off-site generation of renewable energy due to Rhode Island's net metering law, passed by the RI General Assembly in 2016. The NBC is Rhode Island's largest wastewater treatment authority and was one of only 60 utilities worldwide to be named a Utility of the Future in 2017.

In addition to the solar projects and the existing wind turbines, the NBC is currently in construction of a 600kW Combined Heat and Power (CHP) engine that will operate on renewable biogas (a by-product of the wastewater treatment process) at the Bucklin Point Wastewater Treatment Facility in East Providence.

"The NBC will essentially achieve net zero energy use with these projects," said NBC Chairman Mesolella. "We're proud to say that we lead the nation in renewables."

The Richmond project will go on-line by the end of 2017. The Coventry project will follow in spring 2018 and the biogas project in summer of 2018.

"The dollars we save on energy can help buffer the other costs the NBC must undertake to meet our clean water mandates" Mesolella said. "The projects benefit both the environment and our ratepayers and make our state a better place to live, work, and enjoy."

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NBC NEWSLETTERS



NBC Pipeline

January 2017

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
New Year's Day	2 New Year's Day OBSERVED	3	4	5	6	7
8	9	10	11	12	P-Bruins Game @ 7:05 Payday	14
P-Bruins Game @ 3:05	Dr. Martin Luther King, Jr. Day	17	18	19	20	21
22	23	24	CAC Meeting 12 PM	26	27 Payday	28
29	30	Board of Commissioners Meeting 11 AM	All meetings are held a	t the Commission's One	Service Road Offices un	less otherwise noted.



News Briefs...

Acknowledgement of Awards at the December Board Meeting

NBC received the Distinguished **Budget Presentation** Award from the Government Finance Officers Association of the United States and Canada (GFOA) for its annual budget for the Fiscal Year 2017. NBC has been awarded the GFOA Distinguished Budget Award for 14 consecutive



From left to right: Vincent Mesollela, Alice Marchessault, Gail Degnan, Sherri Arnold, Karen Giebink & Raymond Marshall.

years. In order to receive the GFOA's Distinguished Budget Award, NBC puts together a budget document that meets program criteria and must be rated either proficient or outstanding by at least two of the three reviewers in all four categories; policy document, financial plan, operations guide, and communications device.



NBC received the Utility of the Future (UTOF) Award from the Water Environment Federation (WEF) and National Association of Clean Water Agencies (NACWA). A committee of utility leaders selected honorees from public and private utilities throughout the U.S., Canada and Denmark to receive this inaugural award and NBC was 1 of 61 recipi-

ents of this award. The utilities chosen demonstrated exceptional progress and performance in the treatment of wastewater and were selected based on how closely they adopted such UTOF practices such as water reuse, watershed stewardship, community partnering and engagement, and nutrient recovery.

Congratulations...

Congratulations to **David Aucoin**, NBC's Safety and Compliance Coordinator, for obtaining OSHA certification as both a Safety and Health Official and a Safety and Health Specialist through the Keene State College Training Institute Education Center. Achieving this level of certification in the Health and Safety field is no easy task requiring long hours of study and classroom



attendance. Dave's expertise as a Safety and Health Specialist will be put to good use making NBC a safer place to work.

-- Submitted by Jim McCaughey

11 Tips for a Better Living in 2017

It is very important to set goals for ourselves and many have probably already set some New Year's Resolutions or goals to accomplish for the 2017 new year. Here are some tips to follow or add to your current goals for the new year!

0 empty calories / processed foods

1 hour of exercise / reading

2 liters of water

3 cups of green tea / green juice

4 mental & stretch breaks

5 things you're grateful for

6 am meditation

7 minutes of laughter

8 hours of sleep

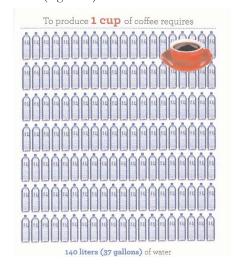
9 thousand steps daily

10 pm time to sleep

-- Standouthealth.com

Did You Know?

Making Coffee is one of the largest uses of drinking water in North America. One cup (8 fluid ounces) of coffee requires 140 liters (37 gallons) of virtual water to get the beans to your grinder. By comparison, a cup of tea uses only 35 liters (9 gallons) of virtual water.



-- "Your Water Footprint" By: Stephen Leahy



NBC Pipeline

February 2017

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	Groundhog Day	3	4
Superbowl 5	6	7	8	9	Game @ 7 PM Payday	11
12 Game @ 3 PM	13	Valentine's Day	15	16	17	18
19	President's Day	21	CAC Meeting 12 PM	23	24 Payday	25
26	27	Board of Commissioners Meeting 11 AM	All meetings are held a	at the Commission's On	e Service Road Offices ui	nless otherwise noted.

News Briefs...

Safety Association of RI Meeting at NBC



Steve Morin, Brown University EH&S

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 profes-

sionals who share their expertise and experiences with fellow members. On January 19th, NBC hosted the quarterly SARI meeting at Field's Point. Safety topics presented at this meeting included OSHA Recordkeeping, Multi-Site EHS Management, and Drugs in the Workplace. The meeting was well-attended by over 25 safety professionals representing different types of industries in Southern New England. NBC remains the host facility for all SARI meetings in 2017. If anyone would like more information on SARI, please contact **Dave Aucoin** at **ext. 418**.

The following February EH&S Trainings have been posted in the Training Central portal on BayNet. Please obtain your supervisor's permission prior to enrolling in any safety training class.

- CPR/AED & First Aid Certification: 2/2 at Bucklin Point
- 8 Hr. Hazwoper Refresher Training (applicable employees): 2/14, 2/16 & 2/21

2016 Workplace Injury Summary for NBC

ESTA is happy to report that the total number of OSHA - recordable injuries throughout NBC decreased by 29% from CY 2015 through CY 2016. Additionally, the total amount of days away from work as a result of injuries decreased by 38% during the same time period. These reductions are a result of the hard work that management and staff put into helping to continuously promote a culture of safety throughout all sections at NBC. Congratulations to all employees on achieving these encouraging results.

-- Submitted by Dave Aucoin

Casual Day Fund

The Casual Day Fund made three donations in January to Hope Hospice & Palliative Care RI in honor of Carmine Goneconte, Multiple Sclerosis, and the American Red Cross of RI.

NBC's Director of PP&R Tom Uva won the raffle at the COB Employee Appreciation event in December which allowed him to designate a 501(c)(3) charitable organization for a donation. Tom chose the RI Chapter of the Multiple Sclerosis Society.

If you participate in the Casual Day Fund and would like to suggest a 501(c)(3) organization for adonation please contact a member of the Casual Day Fund Committee: Jamie Samons, Kim Kirwan, Claudette Kalf, Renee Rinaldi-Patterson, Patricia Pinilla, Jaqueline Giroux, Leah Foster or Lori Vernon.

Congratulations...

To Pretreament Technician, Brandi-lyn

Colacone on obtaining her masters degree from the University of Rhode Island in Environmental Science and Management.



To NBC Executive Director, **Ray Marshall** on receiveing the 2016 Elizabeth A. Cutone Executive Leadership Award from the New England Water Environment Association (NEWEA).



The Award is given annually to an individual(s) who has demonstrated key executive leadership of a water, wastewater or other environmentally focused organization and through that person's leadership made significant advances in one or more elements of the Award criteria.

Congratulations Ray!



NBC Pipeline

March 2017

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 Ash Wednesday	2	Game @ 7 PM	4
Game @ 3 PM	6	7	8	9	10 Payday	11
12 Daylight Saving Time Begins	13	14	15	16	St. Patrick's Day	18
St. Joseph's Day	First Day of Spring	21	CAC Meeting 12 PM	23	24 Payday	25
26	27	Board of Commissioners Meeting 11 AM	29 All meetings are held a	30 at the Commission's On	31 e Service Road Offices u	nless otherwise noted.

News Briefs...

There is No "I" in "Team"

On Thursday February 16th just after 9:30 AM, Operator I **Al Montijo** walked into the Blower Building MCC Room at Field's Point and detected an odor of something burning. Control Systems Administrator **Art Sheridan** and Assistant Control Systems Administrator **Jack Fascitelli** followed behind Al and also detected the odor. Maintenance Supervisor **Greg DaCruz** and Electrician **Vinny Russo** were then on their way to investigate what might be going on, Vinny grabbed the thermal imaging camera and the check the temperature on various MCC panels in the room. There was a hot spot on the feeder B main breaker. In

order to determine the cause of the hot spot, the MCC panel had to be opened and the breaker examined.

Many electrical changes had to be made in order to power down the feeder and gain access to the breaker. Feeder B supplies normal electrical power to many plant buildings, so transferring that power to another feeder was a process that involved



Bus bars in the Main Feeder B breaker enclosure

much of the field's point staff. Operations staff was stationed at critical buildings to ensure the discharge permit would not be compromised. All equipment that was being powered by Feeder B was shut off and other equipment was started in its place. The Hypo and Sodium Bisulfite buildings, among others, were staffed with operators to ensure that the change from normal power to stand-by power went smoothly.

Once the entire load on Feeder B was shed, Vinny Russo and Lead Electrician Steve Morelli Sr. donned their arc-flash suits. They opened the door to Feeder B main breaker and racked out the breaker for examination. With the breaker removed, the extent of the damage was now visible. Several of the breaker contacts had melted, some non-conductive barriers had delaminated and the main bus bars showed some deterioration. At that point it was decided to call in 3-C Electric. Their technicians deal with these types of high voltage issues regularly and they have contacts to locate and purchase high voltage equipment. With the breaker removed, the cabinet door was closed and locked out. In order to get Feeder B equipment back in service, the electricians closed the Bus Tie Breaker. At that point, Feeder B equipment became available for use as it was now being powered by the Feeder A main breaker. Field's Point is awaiting the arrival of a remanufactured main breaker.

This successful outcome is testament to excellent teamwork and communication of the Field's Point Operations and Maintenance staff! Great work everyone!

--Submitted by Paul Nordstrom

Welcome...



Susan Rinaldi, Customer Service Fiscal Clerk

Congratulations...

To Maintenance Supervisor **Greg DaCruz** and his wife on the birth of a beautiful baby boy named Roman on February 26th weighing 5 lbs 13 oz.



March is National Nutition Month

National Nutrition Month has been created by the Academy of Nutrition and Dietetics to educate and promote healthy food



choices, better eating habits and better physical activity choices. It was first initiated in 1973 as a week-long event to create awareness but starting in 1980 it became a month long observance because of growing public interest.

The theme for the 2017 year is "Put Your Best Fork Forward" which is a reminder that everyone holds the tool to make healthier food choices. Small changes in your eating habits and physical activity can go along way.

For more information on National Nutrition Month visit www.eatright.org.

--www.eatright.org

NBC Employees Receive "Hazwoper" Refresher Training

Throughout the month of February 2017, instructors from the RI Fire Academy conducted Hazardous Waste Operations and Emergency Response



("Hazwoper") Refresher training classes for 45 NBC employees. This valuable refresher training is paid for through a grant made available through the RI Local Emergency Planning Committees.

All 3 classes conducted for the 2017 refresher were conducted by former Providence Assistant Chief of Operations Michael Dillon, and former Warwick Fire Chief Frank Colantonio. The 8 hour refresher training is required for all 40 hour certified Hazwoper employees at NBC, per OSHA regulations and NBC's Health & Safety Program. All 40 hour trained NBC employees are trained to be able to assist first responders with hazard identification and site control in the event of a hazardous material incident that may occur in either of NBC's treatment plants or throughout NBC's servicing district.

The following EH&S trainings have been scheduled for March. Please obtain your supervisor's permission prior to registering for any safety class at NBC:

Lockout/Tagout Classroom Training (applicable BP employees)
3/15, 3/21, 3/23, 3/28

--Submitted by Dave Aucoin

NBC Hosts OSHA Training Institute Region 1 Training

NBC hosted a 4-day class on OSHA Construction
Standards February 6th - 9th. This training is recognized nationally as the "OSHA 510" course and was delivered by the OSHA Training Institute & Education Center (OTIEC) - Region 1. Congratulations to NBC employees Joe Moniz, BP Resident Representative and Joe Medina, Mechanical Inspector for completing this important training!



-- Submitted by Dave Aucoin

Moses Brown visits NBC

On Wednesday February 15th Moses Brown's AP
Environmental Science class visited NBC for a tour of Field's
Point and new state-of-the-art
Water Quality Science Building.
Along with their tours NBC
Biologist Nora Lough gave the students a presentation on the biology of the activated sludge and what goes on in NBC's IFAS tanks. Students were able to see the day-to-day work that goes on in the lab and were able to see



some the cool "bugs" in Nora's area of work.

Moses Brown recently transformed their performing arts building into an LEED certified building. Students were able to



check out NBC's Field's Point Administration Building that is LEED certified and compare.

BP Loses Power, Staff Reacts Quickly

On March 2nd at 2:34 PM Bucklin Point's WWTF lost utility power coming into the plant which caused the backup emergency generator to start working. NBC's electricians, operations staff and maintenance reacted immediately resetting the normal equipment and making sure that all systems were working. The worst problem encountered during this



ordeal was that the normal equipment dropping out closed loop causing the GBT building, Blower 1 shut down and air feed valves for the aeration trains to switch offline. Corrections were made immediately and communication between departments was flawless and precise.

National Grid arrived within 30 minutes of being notified. The problem was that the 23.7 kW overhead electrical main feed line along the railroad tracks and the Roger Williams Street substation. The problem was resolved the same day at 4:52 PM and everything was transitioned back to utility power. No untreated effluent was discharged during the process. This was a very impressive effort from all departments and a testament to the hard work and extra training done on a monthly basis.



NBC Pipeline

April 2017

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Calendar of Events for April

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
						April Fool's Day
2	3	4	5	6	Game @ 7 PM	8
Game @ 3 PM Palm Sunday	10 Passover Begins	11	12	13	14 Good Friday	15
Easter	17	18 Passover Ends	CAC Meeting 9:30 AM	Fitness Challenge Kick-off Meeting FP: 11:30 AM BP: 2:00 PM	21 Payday	Earth Day
23	24	Board of Commissioners Meeting 11 AM	26	27	28	29
30			All meetings are held d	ut the Commission's Onc	e Service Road Offices u	nless otherwise noted.

News Briefs...

Bucklin Point Shows Off Great Teamwork During Heavy Rain Event

On Saturday April 1st at 6:40 AM Influent Screw Pump #4 failed during heavy flows at the Bucklin Point Facility. The sudden increase in flow caused the belt to fail. Immediately calls were made to mechanics stressing the urgency to get the repair made to maintain redundancy. John Contrino, BP's Senior E&I Technician was on site working in the gas control building and was instructed by TJ Harrington, BP Shift



Supervisor to get together all the parts needed to make the repair while TJ Harrington was making calls to get a mechanic in for the repair. Dave Brouillard, BP Maintenance Manager was then notified of the situation and started working on replacing the belt with John Contrino's assistance at 7:30 AM.

At 8:25 AM a second Influent Screw Pump #3 failed with the same belt failure problem. With only two Influent Screw Pumps working we were only able to send 76 Million Gallons per Day (MGD) through Screening and Grit. At 8:33 AM we just cracked open the 102 bypass gate to Wet Weather to compensate for the difference in flow (116 MGD) which received Wet Weather disinfection. Repairs for Screw Pump #4 were completed at 8:45 AM and locks were removed, tested and put back online. At 8:52 AM the 102 bypass gate was closed and normal operations resumed. For the 19 minutes that the 102 by pass gate was partially opened we sent .52 MG through Wet Weather receiving Wet Weather disinfection. Thanks to the quick emergency response from Maintenance and Operations impacts were minimum.

On Tuesday April 4th during lunch break staff members who were involed received gold stars for their efficient work and excellent teamwork Great job Mechanic II Mike Arlan, Operator II Jesse Gomez, Process Monitor Bill Dolan, Senior E&I Technician John Contrino, Operations Supervisor TJ Harrington, Operator I Ed Midgley and Maintenance Manager Dave Brouillard!

--Submitted by Marc Pariseault

2017 Spring Fitness Challenge

NBC is pleased to assist you in your efforts to improve your health and well-being. The Spring Fitness Challenge is an exciting voluntary exercise program available to any NBC employee.

How Do I Join?

On April 20th, please stop by the Field's Point Education Room at 11:30 AM or at the Bucklin Point Training Room at 2:00 PM. You will receive materials that you will need for the program, and a new pedometer if you choose to track steps.



How Does It Work?

For this program, you will have an option of tracking steps or minutes. After you sign up, begin by recording your daily steps or minutes on the Spring Fitness Challenge log sheet. This program will be divided into two sessions and at the close of each session, a United Healthcare representative will be on-site to collect the logs. Logs will be due on May 16th and June 5th. Each employee who completes the Spring Fitness Challenge and turns in their logs will receive the \$100.00 wellness reimbursement.

Welcome...



Heather Nicholson, Environmental Monitor

Preparing For the Future

Alex Kuffner of the Providence Journal wrote an excellent article about RI wastewater treatment facilities (WWTF) threatened by climate change posted on March 31st.



Left to right: NBC's Mark Brasil and DEM's Bill Patenaude over by the Field's Point Aeration tanks. Photo Credit: Providence Journal

Almost all WWTF are built on low-lying land near a body of water which makes facilities very vulnerable to flooding. WWTF are aware of what may happen in the event of a 100-year storm and are only becoming more at risk because of climate change with the effects of rising seas and heavy rain events. The historic floods of 2010 and the studies conducted by DEM over the years have made WWTF contemplate taking action - making improvements and updating existing protections which are relatively inexpensive compared to replacing millions of dollars' worth of equipment if a 100-year storm were to happen.

Several NBC staff guided Alex Kuffner through a tour of Field's Point, giving him an excellent overview of the plant operations and the importance of WWTF for protecting public health and the environment. Maintenance Supervisor Ryan Patnode, Maintenance Supervisor Greg DaCruz, Mechanic II Mark Brasil, Operations Supervisor Jim Proulx, Operations Supervisor Cliff Koehler and Maintenance Manager Mike Spring served as excellent ambassadors for the NBC and the wastewater industry as a whole.

To read the full article click here.



NBC Pipeline

May 2017

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Calendar of Events for May

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5 Payday	6
7	8	9	10	11	12	13
Mother's Day	15	Fitness challenge log & certificate due	17	18	NBC Watershed Explorers Conf. at Goddard Park Payday	20
21	22	23	24	25	26	27
28	29 Memorial Day HOLIDAY	30	31			

News Briefs...

Annual Port Evacuation Drill



NBC's ESTA Section has actively been working with members of the Providence Fire Department (PFD) and Providence Emergency Management Agency (PEMA) to plan for the City's Annual Port of Providence Evacuation Drill. This year's drill

is scheduled for Thursday, May 25th and will once again involve the use of the City's Port Siren System and the City's "Code Red" emergency notification system.

All Businesses within the Port area will be asked to exercise their internal Emergency Action Plans per OSHA regulations, and evacuate to designated assembly points within the City. NBC's designated assembly point for a daytime evacuation of the Port remains Rhodes-on-the-Pawtuxet in Cranston. As a reminder, the designated assembly point for NBC employees during an afternoon (3 PM - 11 PM) or nighttime (11 PM - 7 AM) evacuation of the Port is the Providence Dept. of Public Works parking lot, located at the intersection of Allens Avenue and Ernest Street.

NBC volunteers for this year's drill are being requested from each NBC section (preferably one new employee and one 'veteran' employee). If managers would like to designate volunteers, please contact Dave Aucoin at ext. 418 no later than Friday, May 19th. Volunteering for this drill should not take up more than 1 hour of any employee's time.

The following EH&S trainings have been scheduled for May. Please obtain your supervisor's permission prior to registering for any safety class at NBC:

- New Employee Safety Training: 5/2
- CPR/AED & First Aid Training: 5/31

--Submitted by Dave Aucoin

Aliens in the Sewer

IM Operator I, **Bob Dutra** and IM Operator II, **Chris Moran** discovered this alien look-a-like "root ball" lodged in one of the regulators at Brook Street/India Street (OF019) in Providence. Bob and Chris addressed the problem before it became an even BIGGER problem. This alien looking creature managed to become lodged in the regulator system at that location and it was found before it



blocked the pipe. If this "root ball" was left to migrate any longer it would have completely blocked the regulator causing it to bypass. The bypassed flows would have been picked up by the tunnel before discharging to the Providence River. However, catching it early made it much easier to remove. Great job, Bob and Chris!

-- Submitted by Meg Goulet

Welcome...



James Wilson, Junior Networks Communication Administrator

Congratulations...

To Field's Point Assistant Operations Manager **Nathan Boiros** and soon-to-be wife Stacie! Nathan has been working at both facilities at NBC since October 2016 and both facilities wanted to congratulate Nathan and wish him and Stacie many years of happiness. On Friday April 28th both Field's Point and Bucklin Point staff gathered to celebrate Nathan's upcoming nuptials, taking place on Saturday, May 13th in Maine. Congratulations!



Left to right: Rosaleen Grof, Pam Ciolfi, Nathan Boiros, Joyce Ranger & Linda Giesinger.

--Submitted by Marc Pariseault

Reminder...

Session 1 fitness logs and certification form must be handed in on May 16th to HR.



2017 Environmental Merit Awards Breakfast

On April 13th, NBC held its twenty-second 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 outstand-



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

The companies in perfect compliance include: Providence Metallizing Company, Inc., Induplate, LLC, Truex, Inc., A Harrison & Company, Inc., Technodic, Inc., Dominion Energy Manchester Street, Inc., Providence Journal Co., Stackbin Corporation, Univar USA, Inc., Electrolizing, Inc., Tanury Industries, PVD, Inc., Interplex Engineered Products, Inc., Godfrey & Wing, Inc.dba Impco, Inc., Liquid Blue, Mahr Federal Inc., Alloy Holdings, LLC, and International Chromium Plating.

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..

P-Bruins Make it to the Playoffs

The P-Bruins are moving on in the Playoffs! The team won their first round playoff series and will be competing against the Hershey Bears in the Division Finals. They are giving us a special offer for three upcoming games.



- Thursday, May 11th @ 7:05
- Friday, May 12th @ 7:05
- Sunday, May 14th @ 3:05pm* (Game 5 if necessary)

They offer us great lower level seats and tickets are just \$20 each. Tickets include a popcorn and 12 oz. fountain drink or draft for those 21+.

<u>Deadline to purchase is Wednesday, May 10th. Please email or call Talia Girard at ext. 394 on or before that date to purchase.</u>

NBC Welcomes its Latest Superhero: MR. CAN

MR. CAN is NBC's latest campaign to educate people on how to dispose of household grease and prevent these Grease Beasts from clogging our sewer pipes. Grease Beasts, are made from a combination of grease, oils, and fats produced by cooking, and disposable wet wipes like baby wipes, cleaning wipes, and sanitizing hand wipes.

We use millions of gallons of cooking oil every year to make some of the many delicious foods that we



To see more about MR. CAN visit www.narrabay.com

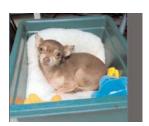
love and enjoy. Although hot cooking oil may be liquid when it goes down the drain but when it hits the cold sewers pipes it solidifies into a greasy mess as does the flushable wipes, baby wipes, etc.

NBC's MR. CAN fights these Grease Beasts and creates awareness. Next time you are cleaning up in the kitchen after dinner let the cooking oil cool, can it and then dispose of it in a trash receptacle. We can all help MR. CAN fight these grease beats. Be like MR. CAN: when you see a Grease Beast, cool it & can it!

IM Celebrates Cinco De Mayo

IM celebrated Cinco de Mayo on May 5th with a Mexican lunch and an adorable little visitor!









NBC Pipeline

June 2017

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Calendar of Events for June

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
					Payday	
4	Fitness challenge log & certificate due	6	7	8	9	10
11	12	13	CAC Meeting 12 PM Flag Day	15	16 Payday	17
Happy Father's Day! Father's Day	19	Board of Commissioners Meeting 11 AM	First Day of Summer	22	23	24
25			28	29	30	
All meetings are hel	d at the Commission's O	ne Service Road Offices	unless otherwise noted.		Payday	

NBC Casual Day Charitable Giving

Do you participate in the Casual Day Fund? Have an idea for a great 501(c)(3) organization that cound use some support? Contact a member of the Casual Day Fund Committee with your idea and lets do some good in our community!

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Feel free to contact Leah Foster, Jacqueline Giroux, Patricia Pinilla, Claudette Kalf, Lori Vernon, Kim Kirwan, Jamie Samons or Renee Patterson.

News Briefs...

NBC Receives Energy Award

On May 15th Barry Wenskowicz, NBC's Pollution Prevention Engineer, accepted the 2017 Better Project award from the U.S. Department of Energy's (DOE) Better Plants Program on behalf of the NBC at the annual DOE' Better Buildings Summit in Washington D.C.

The Better Project Award is presented annually to program partners for outstanding accom-



plishments in implementing projects that save energy at individual facilities. The Fields Point wind turbines were recognized by the award for the role they played saving energy on a regional basis and in leading the NBC to commit to 100% energy neutrality.

--Submitted by Jim McCaughey

Beekeeper to the Rescue

On Wednesday, May 17th a swarm of Honey Bees were spotted between the Field's Point Administration building and Pretreatment building. They created a massive hive on two of the small shrubs between the two buildings. DEM recommended Beekeeper Dane Pursley from Free Range Bee Company, LLC to come and remove the hives. He wore protective gear that went over his head and body but he removed the hives with his bare hands! He allowed us to watch and answered all of our many questions as he removed the nest by just cutting the branch and placing the entire piece into a special box. He explained that the hives are separated into 3 types of bees...



- Workers: their job is to look for food and forage (pollen and nectar) and build and protect the hive.
- The Queen: her one job is to essentially lay eggs approximately 2,000 per day. There is only one queen. If the queen dies worker bees will create a new queen with one of the female larvae and feed it a special food called "royal jelly" a combination of water, proteins and sugars that is secreted from glands on the heads of worker bees.
- **Drones:** their job is to mate with the fertile queen. These bees do not have stingers and they do not collect pollen and nectar.

By the size of the two hives Dane guessed there were about 10,000 bees. Dane was great and very knowledgeable on these local Honey Bees. Honey Bees are very important for the environment; they produce honey and pollinate crops. The Honey Bees are now is safe hands at Free Range Bee Company, LLC with Dane Pursely.



Welcome...



Michael Cook, Rate Anaylst



Richard Bailey, Sr. NET Developer



Daniel Mazza, Field Investigator

Congratulations...

To Kerri Houghton, NBC's Environmental Compliance Technical Assistant, for receiving her Bachelor of Science degree summa cum laude in Honors Chemistry from Rhode



Island College. Great job, Kerri!

SECA Awards Banquet 2017

NBC's Purchasing Fiscal Clerk
Claudette Kalf attdended her last SECA awards banquet on Friday May 19th before retiring this year. Claudette accepted the award on behalf of NBC for participating in another year of SECA.



From left to right: General Treasurer Seth Magaziner, Claudette Kalf and SECA Director Paula Manseau.

NBC Watershed Explorers Celebrate at June is National Safety Month **Goddard Park**

On Friday, May 19th about 670 elementary school students, teachers and guests from twelve 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



Chester Barrows fifth grade students -Charlie, Vincent and Tyron presenting their rap on snails.

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 and Orlo Avenue 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, Chester Barrows Elementary in Cranston and Saylesville Elementary in Lincoln participated in the NBC Watershed Explorers Program this year and attended the conference at Goddard Park.

This year NBC welcomed a special guest speaker, Abigail Abrahamson, a high school student from Rehoboth.

Massachusetts. She is a member of Dr. Jane Goodall's Roots and Shoots US National Youth Leadership Council. Dr. Jane



Abigail Abrahamson giving her speach to the students at Goddard Park.

Goodall's Roots & Shoots is a youth service program for young people of all ages. Their mission is to foster respect and compassion for all living things, to promote understanding of all cultures and beliefs, and to inspire each individual to take action to make the world a better place for people, other animals, and the environment. Abigail spoke to the students about the program, mission, her passions and some example projects she's done to hopefully be of influence to the many young listeners.

Students presented their macro invertebrate song, rap or poem from their projects followed by educational activities presented by NBCstaff, Biomes Marine Biology Center, Audubon Society, 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.

Many thanks to all the NBC Staff who volunteered at the conference. Your efforts were absolutely crtical to day's enormous success!

Sponsored by the National Safety Council and observed annually in June, National Safety Month focuses on reducing leading causes of injury and death in



the workplace, at home and on the road. Throughout June, NBC's ESTA program will be working hard to promote National Safety Month by providing weekly tips on ways NBC employees can all help to keep one another safe.

Weekly promotional items will cover the following topics:

- Week 1: Stand Up to Falls
- Week 2: Recharge to Be In Charge (Focusing on Fatigue)
- Week 3: Prepare for Active Shooters
- Week 4: Don't Just Sit There (Focusing on Ergonomics)

Managers are encouraged to post materials in common work areas through June. Thanks in advance for your participation and continued commitment to health and safety.

--Submitted by Dave Aucoin

NBC Online Training - A Valuable Tool

All NBC Union employees are required to complete Healthy Back/Preventing Slips, Trips and Falls training annually. The training is also made available for all non-union NBC employees. Employees need to enroll in this online training each year. Both the "Back Safety" and "Preventing Slips, Trips and Falls" classes MUST be completed.

How to Access NBC's Online Optional Safety Training (in accordance with NBC Policy # G-S-4):

- 1. From the BayNet homepage, click on the "Training" tab at the
- 2. The Training Central page will appear. Click on "Safety Training."
- 3. Four catalogs will appear on the next screen. Click on the "NBC Online Safety Training" Catalog link.
- 4. Click on the "Online Safety Training" link on the next screen.
- 5. On the next page, click the link below the course description.
- 6. From the Beacon Mutual login page, enter your username and password. These are available from your supervisor. (DO NOT click "New User Registration."
- 7. From the homepage, click on the picture that says "General Safety" and locate the classes in the left-hand column.

Please remember that this is the only online safety training class that may be taken by NBC employees in lieu of attending required classroom and/or field safety trainings.





NBC Pipeline

July 2017

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Calendar of Events for July

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

News Briefs...

Ocean State Alliance Sweeps the Competition

On June 5th and 6th NEWEA held its Operations Challenge in Falmouth, MA at the NEWEA Spring Meeting. The Rhode Island team, "Ocean State Alliance," had an outstanding performance and won first place overall at the regional competition. The team had begun preparation for the event in early March and met every Wednesday afternoon for training. Overall, many hours of dedication and hard work were the catalyst for



From left to right: Nora-Jean Lough (NBC), Janine Wells Burke (Executive Director, Warwick Sewer Authority), Kim Sandbach (NBC), Walter Palm (NBC), Pete Rojas (Cranston, Veolia Water), Peter Hassel (Smithfield, Veolia Water), Eddie Davies (NBC), Tyler Ippi (Cranston, Veolia Water), Russ McGinnis (NBC), Scott Goodinson (Superintendent, Warwick Sewer Authority), and Michael Spring (NBC)

the team's success; however, team captain and Ops challenge veteran, Eddie Davies (NBC), was the driving force behind this operation. His years of knowledge and connections within the industry made their success a reality.

The Ops Challenge is a venue that allows wastewater professionals to show-case their skills and improve upon them in a fun and challenging environment. There are Maintenance, Lab, Safety, Collections, and Process events. Each one touches upon different skills and aspects of the wastewater field which helps the participants understand the bigger picture of why we are here doing what we do. As Michael Spring (NBC Employee and NEWEA State Director) would say, "at the end of the day we are here to make clean water and send everyone home safe to their families." Every position within the industry is valuable and we are all fighting for a common cause, clean water and a clean environment.

The RI team had two historic moments at the competition this year: they earned a first place trophy for each of the five events, and the team had its first female member, Kim Sandbach, who was instrumental in the first place win. NBC's Walter Palm and Nora Lough participated as judges and volunteers, playing a key role in the coordination of the events. Everyone's hard work and sacrifices helped to put Rhode Island on the map. Now the pump is primed both figuratively and literally, and the team is ready to work even harder as they train for the National Stage at the WEFTEC event in early October.

--Submitted by Russell McGinnis

Welcome...



Tiziano Roncone, Customer Service Temp

Best of Luck...



To NBC's Steve Lallo, Permits Coordinator on his new endeavors in Florida with his family. Best of luck and farewell Steve!

Hot Air Balloon Ride Over Bucklin Point

Assistant Operations Manager Nathan Boiros had quite the view bright and early Thursday, June 22nd. This beautiful hot air balloon floated over Bucklin Point at about 6:30 AM.



Osprey Nesting at Bucklin Point

There has been a lot of activity over the past couple months on the Osprey Cam at Bucklin Point. Three eggs were laid in the nest back in May and hatched the first week in June. The baby Osprey chicks are growing so fast and are almost ready to leave the nest.



2 weeks old



5 weeks old

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

On Thursday, June 8th, NBC awarded many talented young artists and scientists at NBC's 24th annual Poster Contest & Science Fair Awards Ceremony. This year's poster theme was "Footprints On The Bay." Students were asked to artistically showcase the activities, animals, and/or artifacts that bring their feet to visit the Narragansett Bay.

Science Fair projects were judged at the RI State Science Fair for excellence in water quality investigation. Students poster contest winner Alyia Ouch.



Environmental Education Coordinator Cynthia Morissette with kindergarten

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 2018 NBC calendar coming out in December.

Wishing Two NBC Employees a Happy & Healthy Retirement

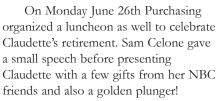
Purchasing Fiscal Clerk Claudette Kalf Retired from NBC on June 30th after 28 years with NBC and Lab Technician Ralph Ruggiano after 35 years. Both Claudette and Ralph have been with NBC through its many changes



and NBC appreciates all of their hardwork and dedication throughout the years.

On Wednesday June 14th, Labratory staff put together a luncheon to celebrate Ralph and his retirement. Walter Palm and Tom Uva gave a speech and presented Ralph with a golden

plunger for his 35 years of service at



NBC wishes both Claudette and Ralph the best in their retirement!



At the June annual board meeting Vincent Mesolella and Raymond Marshall took the time to acknowledge three awards received by the Narragansett Bay Commission and recognized those who



made the awards pos- From left to right: Vincent Mesolella, Barry Wenskowwicz, Jim McCaughey and Ray

NBC received the Marshall.

2017 Better Project

Award, the 2017 Lead by Example Energy Award and the 2016 Campaign Award from SECA.

The 2017 Better Project Award is presented annually by the

U.S. Department of Energy to program partners for outstanding accomplishments in implementing projects that save energy at individual facilities. The 2017 Lead by Example Energy Award recognizes State agencies and municipal govern-



From left to right: Vincent Mesolella, Claudette Kalf and Ray Marshall.

ments for significant contributions toward the promotion and implementation of comprehensive clean energy measures that advance Lead by Example goals under Governor Gina M.



From left to right: Vincent Mesolella, Ralph Ruggiano and Ray Marshall.

Raimondo. The 2016 SECA Campaign Award is awarded every year to particpants.

Along with the awards a Resolution of Congratulations and Appreciation was given to Labratory Technichian, Ralph Ruggiano for being the longest serving NBC Employee with 35 years of service before retirng.





NBC Pipeline

August 2017

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Calendar of Events for August

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

News Briefs...

Stay Informed With CodeRed!

Although NBC has an internal emergency communications system in place, all NBC employees should also be aware of a valuable external notification system that is available free-of-charge.

The RI Emergency Management Agency (RIEMA) has purchased and made available to all cities and towns in RI a new high-speed emergency notification system that allows authorized



officials to notify residents and businesses by telephone, cell phone, text message, email and social media regarding time-sensitive general and emergency notifications. This new system is called CodeRed. Users of the software are allowed to enter their home and business addresses, which allows for the receipt of emergency notifications in each area. CodeRed messages may include boil water advisories, local road closures/construction, evacuation notices, and severe weather warning notifications.

NBC has a corporate CodeRed account through Providence Emergency Management Agency (PEMA). This ensures that NBC's internal emergency notification system is activated once notice is received from PEMA. However, all NBC employees are encouraged to register for CodeRed alerts. This can be done by visiting www.providenceri.gov/pema, clicking on the CodeRed feature and entering all required information. Additionally, the CodeRed Mobile Alert app is available for free download on Google Play and the App Store.

<u>Safety Training:</u> All EH&S training classes for August will soon be posted on BayNet. As always, please obtain supervisor permission prior to attending any safety training class.

-- Submitted by Dave Aucoin

On a Positive Note...

NBC Fleet Mechanic, **Michael Ceasrine** experienced a feel good moment, that all NBC employees will appreciate. While out with some friends after work in East Greenwich Mike was approached by a woman who commented on his NBC shirt. She expressed how pleased she was with the work NBC has done to clean the Bay. The woman and her husband are avid boaters who greatly enjoy the clean water and noted the increase in cleanliness since the CSO tunnel has been online. Mike thanked her for her kind words and agreed, Mike himself spends alot of time on the water and can say the Bay looks exceptional these days. He noted that we as a group work very hard to ensure the bay is as clean as it can be. With this positive note we can safely say that what we do at NBC everyday is making a difference.



Photo Credit: www.unbstormwater.org

Congratulations...

To NBC Environmental Scientist Eliza Moore on being the first to write an article for New England Estuarine Research Society's (NEERS) new column "A Day in the Life" in their monthly newsletter. Eliza wrote about her



day-to-day routine as an Environmental Scientist at NBC. Between emails, project meetings, monitoring reports, collecting data, updating snapshot, reviewing sample, etc.; there is so much of Eliza's daily routine as well as other NBC environmental Scientists that make NBC so successful at working for a cleaner bay today. To read her full article go to - A Day in the Life of Eliza Moore.

To Field's Point Inventory Control Clerk **Steve Fascitelli** on being a first-time grandpa! Steve's daughter Amanda gave birth to a beautiful baby boy on July 16th named John Paul, weighing 5lbs 9oz.



Benefits of Clean Water

Whales have been spotted more often in Narragansett Bay thanks to the increase in cleanliness. This photo below was taken off Aquidneck Island and posted on Facebook on August 1st on the "Only in Rhode Island" page.





NBC Pipeline

September 2017

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 September

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4 Labor Day HOLIDAY	5	Fall Tuition Reimbursement Due	7	8 Payday	9
Grandparents Day	11 Patriot Day	12	13	14	15	16
17	18	19	CAC Meeting 12 PM Rosh Hashanah begins	21	22 First Day of Autumn Payday	23
24	25	Board of Commissioner's Meeting 11 AM	27 All meetings are held t	28 at the Commission's On	29 Yom Kippur Begins e Service Road Offices un	30 nless otherwise noted.

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

Applications for tuition reimbursement for the upcoming Fall Session has been <u>extended</u> and must be submitted to **Joanne Maceroni by Wednesday, September 6th**. 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...

Mark Your Calendars...

Flu shot clinics will be held at various NBC locations on **Tuesday, October 10th**. Free flu shots are offered to all NBC employees including those who currently waive NBC health coverage. Please read the attachment for further details including online registration instructions for the location that is most convenient for you.



- Field's Point 1:00 PM 2:00 PM (ID: nbay camp)
- COB 9:30 AM 11:30 AM (ID: nbayserv)
- Bucklin Point 1:00 PM 2:00 PM (ID: nbaycamp)

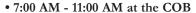
To register: Log-on to www.thewellcomp.com

Scroll down to: Register Now

Click: Flu Click: Worksite

Enter Login ID: (see above next to time details for ID)

NBC's Know Your Numbers Event is scheduled for **Wednesday, November 8th**. This is a free health screening event open to UHC covered employees.



- Earn a \$100 wellness incentive award, if eligible
- Enjoy some snacks
- Receive a \$75 gift card through the Rally Program, if eligible
- Pick up an NBC souvenir



To register: Go to My.QuestForHealth.com and be sure to click "on-site event" Registration Key: narragansettbay2017
Unique ID: UHC Member ID

Healthy Back: Preventing Slips and Falls training classes will be held...

- Wednesday, September 13th at Bucklin Point 7:00 AM & 3:00 PM in the training room.
- Tuesday, September 19th at Field's Point at 7:30 AM & 1:00 PM in the education training room

To register use the baynet training portal to sign up.



Welcome...



Sean F. Grace, Lab Technician



Joshua B. Hoak, BP Operator

Congratulations...

To IM Inspector Anthony
Cicciarelli on his engagement to Sarah Townes on August 20th. The couple celebrated their third anniversary with dinner and a walk along the



seawall in Narragasnett. Anthony popped the question in front of the fountain in Memorial Square in front of the Coast Guard house and Sarah said yes! The two have not set a date yet. Congratulations and best wishes on their journey together.

-- Submitted by Meg Goulet

NBC Shredding Event

NBC will host a shredding event for NBC employees on **Thursday, September 21st from 8 AM - 4 PM in the COB parking lot.** Since RIRRC no longer allows shredded paper in its



household recycling, employees can bring their materials to NBC where SHRED RI will shred and properly dispose.

2017 Atlantic Hurricane Season Outlook

The Atlantic Hurricane Season officially began on June 1st and runs through November 30th. Historically, August through

October has been observed as the peak of hurricane season. Scientists from several national organizations have predicted the following data to the right for the current Atlantic Hurricane Season.



Hurricanes are violent storms that can bring intense winds, heavy rain, coastal storm surge, floods, coastal erosion, landslides and even tornadoes. All NBC employees are encouraged to remain vigilant and educated this hurricane season while at work and at home. Hurricanes in New England are unique natural disasters in that plenty of advance warning is provided to the public by state and local officials.

All employees are encouraged to review the emergency contact lists and preparation plans within their sections, have a plan in place for accounting for family members and loved ones, and remember that many communication resources are available.

Utilizing Providence's new Code Red emergency notification system and adhering to NBC's Adverse Weather Policy are a few of these resources.



The Safety Corner: The following health & safety trainings are scheduled for September and are posted on BayNet. Please obtain supervisor approval prior to attending any safety training.

- Hazardous Waste Management Training: 9/5 & 9/7 @ BP, and 9/26 & 9/27 @ FP
- \bullet Healthy Back/Preventing Slips, Trips and fall: 9/13 @ BP and 9/19 @ FP

-- Submitted by Dave Aucoin

Two-Time NBC Science Fair Winner Competes Moves on the International Finals



Photo Credit: The Warwick Beacon

Nicholas Berg, a student from Bishop Hendricken High School won the national competition for the 2017 Stockholm Junior Water Prize, the most prestigious youth award for a water-related science project and is now moving on to compete in the international finals in Stockholn Sweden. The US competition took place in Charlotte, North Carolina June 16th through the 18th where he competed with many other talented students from across the country and achieved first place.

Nicholas has participated in the RI State Science Fair at CCRI where NBC has awarded his work for the past two years in a row. This years project was on the "Impacts of 1,2-Propanediol Effluent Discharge on Reproductive Rates and Dispersion Patterns on Anabaena Inaequalis and Chlamydomonas Reinhardtii." Nicholas received an award and check from NBC at our annual Gallery Night on June 8th where we display the art work from poster contest winners and schience fair winners.

Nicholas competed in Sweden for International Awards August 27th through September 1st. For more information about the competition, please visit www.SJWP.org

Casual Day Fund

NBC is looking for suggestions for 501(c)(3) organizations to contribute to from the Casual Day Fund. If you are a participant of the fund and would like to make a suggestion for a donation, please contact one of the committee members: Leah Foster, Jackie Giroux, Kim Kirwan, Renee Patterson, Patricia Pinilla, Lori Vernon, or Jamie Samons.





NBC Pipeline

October 2017

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Calendar of Events for October

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5 Full Moon	6	7
8	9 Columbus Day HOLIDAY	Flu Shots COB: 9:30 AM - 11:30 AM FP & BP: 1:00 PM - 2:00 PM	11	12	Payday 13	14
15	16 Bosses Day	17	18	19	20 Payday	21
22	23	24	25	26	27	28
29	Pumpkin Decorating Contest FP Edu. Room 11:30 AM	Halloween				

News Briefs...

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- Earn a \$100 wellness incentive award, if eligible
- Enjoy some snacks
- Receive a \$75 gift card through the Rally Program, if eligible
- Pick up an NBC souvenir

To register: Go to My.QuestForHealth.com and be sure to click "on-site event" Registration Key: narragansettbay2017
Unique ID: UHC Member ID

•••••

The P-Bruins are offering NBC a great special for upcoming games in November.

Games are on Friday, November 3rd @ 7 PM and Sunday, November 5th @ 3 PM. Tickets are just \$22 per person. Tickets include a popcorn and soft drink OR draft at the game. Also included is a FREE \$3 Dunkin Donuts gift card with every ticket.



<u>Deadline to purchase is Friday, October 20th.</u> Please email or call **Talia** Girard at ext. 394 on or before that date to purchase.

Welcome...



Nikolas Carroccio, FP Operator I



Roberto Castellanos, FP Mechanic I



Nicholas Zabbo, FP Operator I

NBC's Annual Pumpkin Decorating Contest

Join us Monday October 30th for NBC's Annual Pumpkin Decorating Contest. Each section must decorate or carve a pump-



kin for the contest. We will use the same voting method used in the past 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.

Contest Details:

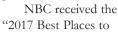
Education Room at FP Administration Building Monday, October 30th 11:30 AM.

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 NBC!

At the September 26th Board of Commissioners meeting there was an acknowledgement of awards before the meeting took place.





Work" award from Providence Business News for the seventh consecutive year. Senior Human Resource Representative Brenda Smith, Labor Relations Manager Diane Buerger and Director of Executive Affairs Laurie Horridge accepted the award on behalf of NBC.



NBC's Field's Point Facility received two prestigious awards, perfect permit compliance from the Narragansett Water Pollution Control Association (NWPCA) and the peak performance silver award for having no more than

five violations per calendar year from the National Association of Clean Water Agencies (NACWA). Both awards were accepted by Field's Point Assistant Operations Manager Nathan Boiros and Senior Process Monitor Stephen Cote.

NBC's Bucklin Point facility received another presitigious

award from NACWA, the peak performance gold award for having no permit violations for the calendar year. Bucklin Point Assistant Operations Manager Terrence Harrington, Jr. and Operations



Supervisor Anthony Turchetta, Jr. accepted the award on behalf of the Bucklin Point facility.

NACWA awarded NBC the Platinum Excellence in



Management Award for fully implementing and/or taking substantive steps to implement a total of nine of ten attributes of effectively managed water sector utilities. Director of Executive Affairs Laurie

Horridge, Director of Construction and Engineering Rich Bernier, Director of Environmental Science and Compliance Tom Uva and Director of Administration and Finance Karen Giebink accepted the award on behalf of NBC.

Improved Automation at Washington Park Pump Station

Much work has been completed at the Washington Park Pump Station over the past three months to improve the controls systems operation.



As originally designed, Field's Point only received one common alarm from the Washington Park Pump Station whenever anything occurred. Under the new improved system, separate alarms for intrusion, pump failures, level sensing and atmosphere monitoring come into SCADA at Field's Point. In order to accomplish this, Control Systems Administrator Art Sheridan had a plan to re-purpose the Blower Master Control Panel that was replaced when the new multistage blowers were installed in the Blower Building. Electrician Steve Morelli and Instrument Technicians Gary Ruggiero, Brian Lalli and Marcos Quinones made Art's vision a reality. They ran electrical power and control wires and re-programmed the PLC, while performing the control systems upgrade, they also installed new radar level sensors and atmosphere monitoring equipment. Assistant Control Systems Administrator Jack Fascitelli developed the new computer visuals and he assisted with system check out. All of this information is telemetered to the FP SCADA system via radio signal. Antennas for that system were installed by Glenn Peterson, FP Mechanic. Thanks to everyone involved with the success of this project.

--Submitted by Paul Desrosiers

A Sweet Treat for Fall

The season of apple picking is among us. Try out these tasty baked apples for a sweet treat.

Ingredients:

4 small Honeycrisp apples 4 tbsp butter, softened ½ cup packed brown sugar 1 tsp ground cinnamon ½ tsp ground cardamom ¼ tsp ground nutmeg ¼ cup chopped walnuts



Steps:

Preheat oven to 425°F. Trim the tops off the apples and use a spoon to scoop out the core and the seeds. Make sure to keep the bottom inch of the apple intact. In a medium bowl, combine the butter, brown sugar, spices, and walnuts. Using a spoon, fill the apples with the butter mixture. Set the apples upright in a baking dish and bake until tender and bubbly, about 20 minutes. Garnish with your favorite ice cream and serve immediately.



NBC Pipeline

November 2017

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Calendar of Events for November

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	Game @ 7 PM	4
					Payday	Full Moon
Game @ 3 PM Daylight Saving	6	7	Know Your Numbers Event 7 AM - 11AM COB	9	Veterans Day Observed	11 Veterans Day
12	13	14	15	16	17 Payday	18
19	20	21	22	Thanksgiving Day	24	25
26	27	28	29	30		

2017 Employee Appreciation

Employee Appreciation Luncheons for...

IM: December 13th at 11:30 AM

COB, Pretreatment, EMDA and Lab: December 14th from 12 PM - 2 PM

<u>Field's Point:</u> All shifts December 19th <u>Bucklin Point:</u> All Shifts December 20th



News Briefs...

NBC's Hearing Conservation Program



Many NBC employees may be exposed to noise in the workplace at levels of 85 decibels (dB) or higher, measured as a timeweighted average over the course of a typical work shift. For this reason, NBC is required by OSHA standards to institute a Hearing Conservation Program. One of the major requirements of the Program is to offer baseline and annual hearing tests, or 'audiograms' to applicable NBC employees. These annual audiograms were recently conducted on-site in the Interceptor Maintenance Garage on October 17th & 18th. A total of 149 NBC employees obtained their annually required hearing test inside the comfort of a mobile testing van, which is conveniently comprised of private hearing booths for each employee included in the audiometric testing program. This "lab on wheels" is a big complement to NBC's Hearing Conservation Program and offers a unique level of convenience for applicable NBC employees. For those

employees in the program who weren't able to make it to the on-site testing, please remember that you have until November 16th to obtain your hearing test at the designated off-site testing location.

In addition to the availability of adequate personal protective equipment (PPE) such as earplugs and earmuffs, administrative controls are also in place to ensure a safe work environment is maintained throughout NBC, especially for employees working in loud environments. All NBC employees are reminded to protect their hearing while at work, as well as at home.

--Submitted by Dave Aucoin

For the first time in NBC history...



On October 19, 2017, the NBC conducted a lien sale. For the first time in NBC history, there were no properties available for public bid after Rhode Island Housing exercised its right of first refusal on a select group of accounts. The remaining accounts that were selected for the sale were either paid, reached payment arrangements, or were removed for other reasons.

-- Submitted by Kevin Burke

Mark Your Calendars

NBC's Know Your Numbers Event is scheduled for

Wednesday,



November 8th. This is a free health screening event open to UHC covered employees.

- 7:00 AM 11:00 AM at the COB
- Earn a \$100 wellness incentive award, if eligible
- Enjoy some snacks
- Receive a \$75 gift card through the Rally Program, if eligible
- Pick up an NBC souvenir

To register: Go to My.QuestForHealth.com and be sure to click "on-site event" Registration Key: narragansettbay2017 Unique ID: UHC Member ID

Congratulations...



To Operations and Maintenance Fiscal Coordinator, **Pam Ciolfi** on the birth of another beautiful baby boy. Luca was born on October 8th weighing 8 lbs 4 oz. Pam and Luca are doing great and TJ is very excited to be a big brother!

NBC's Annual Pumpkin Decorating Contest













Reuse Irrigation Project



A wastewater reuse project at the Field's Point Wastewater Treatment Facility has come to fruition. The system utilizes treated effluent from the plant to irrigate the 7,000 square foot lawn area to the south of the Pretreatment Building. Eighteen rotary heads are programmed from a controller inside the Gravity Thickener Building to engage on scheduled days. The system was designed with add on capabilities that could be used to

extend irrigation to other areas of the plant.

Many NBC departments contributed to the success of this project. Interceptor Maintenance carefully excavated a trench that skirted utility lines. Operation & Maintenance tapped into the plant water line in the gravity thickeners and ran the new piping along the wall and outside to the trench. Plumbing and electrical were run underground to feed the sprinkler system at the end of the lawn. Samples of the treated effluent are collected weekly by EMDA and analyzed by our own Laboratory. The ESTA section has been monitoring and evaluating the collected sampling data to help assure compliance with wastewater reuse standards established by the RI Department of Environmental Management (DEM). Currently there are only two other wastewater reuse applications within the State of Rhode Island. This demonstration project has been designed to help both NBC and RIDEM better understand existing Rhode Island wastewater reuse requirements and how they may be improved to encourage more use of reclaimed water throughout the state. This is a wonderful demonstration on water conservation that will save about 80,000 gallons of potable water per season. A person could shower eight minutes every day for 10 years with that amount of water.



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December 2017

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					1	2
					Payday	
3 Full Moon	4	5	CAC Meeting 9:30 AM	7	Game @ 7 PM	Game @ 7 PM
10	11	12	13	14	15	16
Game @ 3 PM		Board of Commissioner's Meeting 11 AM Hanukkah Begins	IM Employee Appreciation 12 PM	COB, PT, EMDA & Lab Employee Appreciation 12 PM - 2 PM	Payday	
17	18	FP Employee Appreciation (All Shifts)	BP Employee Appreciation 7 AM - 3 PM shift @ 11:30 AM	BP Employee Appreciation 3 PM - 11 PM & 11 PM - 7 AM shifts	22	23
24		26	27	28	29	30
Christmas Eve	Christmas Day	Kwanzaa Begins			Payday	
31 New Year's Eve			All meetings are held a	it the Commission's On	e Service Road Offices un	aless otherwise noted.

News Briefs...

2017 Employee Appreciation

Employee Appreciation Luncheons for...

IM: December 13th at 11:30 AM

COB, Pretreatment, EMDA and Lab: December 14th 12 PM - 2PM

Field's Point: All shifts December 19th

Bucklin Point: 7 AM - 3 PM shift - December 20th 3 PM - 11 PM shift December 21st

11 PM - 7 AM shift - December 21st



Tips to Help Prevent Winter-Related Injuries



Winter is fast approaching which means winter hazards loom ahead especially for those who work outdoors. The Bureau of Labor Statistics recently reported that slips, trips, and falls accounted for 800 workplace fatalities in 2015. These types of incidents accounted for 38% of all NBC injuries in 2016. Slips, trips, and falls happen year-round, but hazardous incidences increase significantly during winter-time due to slippery sidewalks, icy parking lots and surrounding work areas (even around our own homes). With the proper awareness, preparation and presence of mind, employers and employees can prevent or significantly reduce the likelihood of injuries by following a few preventative measures:

- Keep walkways, stairways driveways and other work areas clear. Remove hazards such as water on floors, entryways, and snow on sidewalks immediately. Mark hazardous areas. Use temporary signs, cones, barricades or floor stands to warn passing workers.
- Take short steps and walk at a slower pace so you can react quickly to a change in traction when walking on an icy or snow-covered walkway.
- Identify steps, ramps, and other elevation changes. When walking, look where you are going and have your hands ready to steady yourself should you slip.
- Avoid carrying heavy loads that may compromise your balance.
- Outside, wear footwear with heavy treads for increased traction. Wear several layers of loose-fitting, lightweight, warm clothing rather than one layer of heavy clothing.
- Wear a hat; most body heat is lost through the top of the head.
- Walk along grassy areas if a walkway is covered in ice. Make yourself visible to drivers by wearing brightly colored, reflective material jackets or clothes.

REMEMBER, THINK TWICE BEFORE WALKING ON ICE!!

-- Submitted by Laurie Vernon

Welcome...



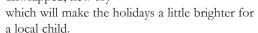
Anthony Erricola, Pretreatment Engineer



MichelleLabossiere, Collections Analyst

Port of Providence Toy Drive

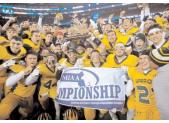
NBC will be joining other businesses in the Port of Providence in a toy collection for underprivileged children. Please consider donating an unwrapped, new toy



Toys can be dropped off at the COB Employee Appreciation Event on Thursday, December 14th in the main conference room.

Congratulations...

To IM
Operator II
Maurice
Jarest's son
Robert who
played an awesome football
game Friday,



December 1st. Photo credit: The Sun Chronicle

The King Philip Regional High Warriors beat Lincoln-Sudbury High 10-7 at Gillette Stadium winning the MIAA Division 2 Super Bowl championship. Congratulations to Robert and the King Philip Regional Football team on their Super Bowl win!

-- Submitted by Meg Goulet

EDUCATIONAL DOCUMENTS



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?

operates the state's two largest wastewater

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, matine 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.

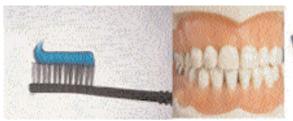
What if I need technical assistance?

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



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 discharges 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

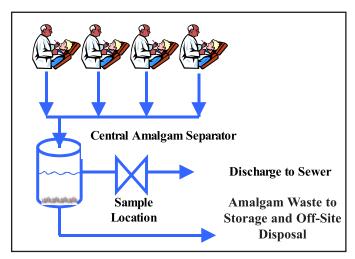
Option 1 is the preferred approach and requires the installation and operation of an amalgam separator and implementation of the attached NBC BMPs. Through Option 1, all amalgam-contaminated wastewater, including wastewaters from cuspidors and vacuum systems, must flow through an amalgam separator and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

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.
- 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



Typical wastewater plumbing diagram for dental office with an amalgam separator

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 1of 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.

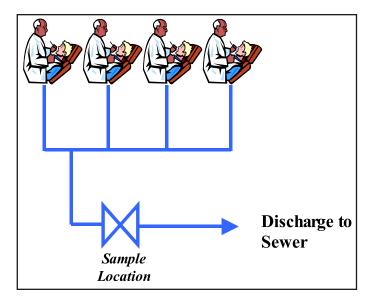
The wastewater sample collection valve must be configured and installed in such a manner that a representative sample of all and any amalgam containing wastewater can be collected at any time during normal operating hours. This will require the installation of a single central sampling location for all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

- 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."
- 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 constrictors 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

Additional Useful Information

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.
- 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.
- 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
- 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 One Service Road Providence, RI 02905



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:

NARRAGANSETT BAY COMMISSION



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?

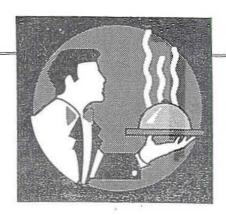
Grease discharges are predominantly generated from washing and cleaning operations and not from fryolators or deep frying units as most people might think. The pot washing sink, dishwasher pre-rinse station, and garbage grinder are the major sources of grease discharges to the sewer system.

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 form 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 inground 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 FRACTICES WORKBOCK ROA RESTAURANTS stoop perferent partities

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

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

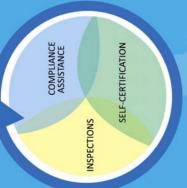


1 Service Road Providence, RI 02905 Phone: 401.461.8848 Fax: 401.461.6540 www.narrabay.com



NARRAGANSETT BAY COMMISSION

FATS, OILS, OGREASE



ENVIRONMENTAL RESULTS

PROGRAM

One Service Road Providence, RI 02905

Tel: 401.461.8848 Fax: 401.461.6540

www.narrabay.com

Fats, Oils and Grease

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



animal fats in the preparation of food products.

Tvnical operations that produce FOG include washing of

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

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.

deplete water oxygen levels.

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 Lincoin Septage Receiving Facility: 692 Washington Highway Lincoin, 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.

PERMITIING 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 putpose.

- 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

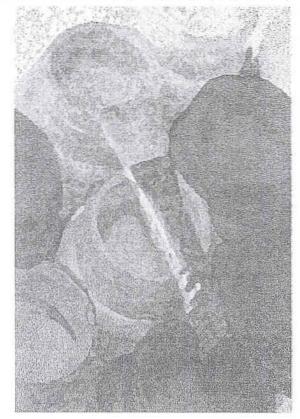
- Upon arriving at the station, the driver is to wait in line to use the facility.
- •When it is your turn, the facility operator will inspect the stickers on your vehicle, scan your computer chip and take your manifest and other associated information. If anything is not in order, the load will be refused.
- Prior to discharging you must take a sample under the perview 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

FINE ART PAINTING STUDIOS





with various supplies and materials in your studio. It is also The purpose of this prognule is to guide you in protecting your health and preserving the environment as you work interded to help you save money and to comply with existing anvictions enfollogulations.

Following these guidelines will keep you and your environment safe. Sources of health & safety information on the Internet for artists

Disposal of houselight inzardous waste in RI:

A searchable health & safety database by medium: www criticson az us/arbazards/kome bunt

www.ithrary.unisa.edu.au/internet/pathfind/arthrzmds.htm List of references and more:

Comprehensive list of articles covering many mediums www.croetweb.com/outreach/croetweb links.cfm?topicID=2

Litt of books, periodicals and organizations; http://wally.nl.com/pubs/guides.healthhaz.html

www.libcary.wwu.edu/ref/subjguides/art/arthazards.html Comprehensive list of articles:

Article entitled dat Painting und Drawlerg www.nic.edu/sph/glakes/harts/HARTS_hibiury/paintdrw.txt

Very comprehensive list of resources for many modis: www.tracart.info/hazards.htm

Safety Primer with references: www.sam.mil.edu/pub3/consumered/nf12e.htm

www.artspoceseatile.org/solutions/safety.html Safety Primers:

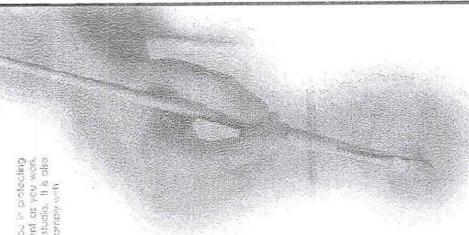
uwias educhs/arhaz.hml

www.gamblincolors.com/safety lum

www.craftsreport.com/maytk/studiossuus.html Studio Ventilation:

How to manage contaminated raga: www.cabq.gov/p2/shoprowf.pdf

http://www.danielsniith.com/leaflets.html Technical leaffets:



Paint MSDSs available under Bealth & Safety rection: www.winnomewton.convindex2.php

www.lehigh.edu/-kaf3/guides/nads.html Primers about how to read a MSDS:

Printers about how to read a MSDS; http://offices.colgate.edu/cheming/insdsfactsheef htm

Studio tips: www.liquitex.com/healthsafets/safestudiotips.clm

NARRAGANSETT BAY COMMISSION Environmental, Health & Safety

MANAGEMENT PRACTICES

FINE ART PAINTING STUDIOS



As you are probably aware, many art materials contain ingrethents that are took 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 ment. Also, oil paints contain solvents and require cleanup with solvests, such as turpentine, mineral spirits, or other paint thin-ners. 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 breathy, 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 alternagouache, may contain heavy metals such as cadmium, chromium, and lead, which can be hazardous to your health and the environ tives must be handled safely and disposed of properly.

by a variety of local, state and federal requirements, such as izes 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 under the Clean Water Act to regulate sources (such as painting rended in this guidance document can belp sewer authorities such as the Narragansett Bay Commission (NBC) to regulate wastewater disposal to Publicly-Owned Freatment Works (POTWs). Sewer authorities have obligations als and wastes from your work. This may eliminate the need for Use of many of these materials can produce wastes controlled Rhode Island's Hazardous Waste Management Act, which authorstudios) that discharge process wastewater into the sewer system you to understand, and minimize or climinate hazardous materiyou to obtain permits from these government agencies

tained 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 Wise purchasing choices will help you reduce or climinate taxards 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 unrounts of metals concompare 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 cates how quickly the solvent will evaporate into the nir 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 hazfor 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 indiardous materials in your studio.

est 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 theuter group, art schools or a matemarker or graphite pencil to label each container, and replace 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 oxifrom 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 the label if it becomes illegible. Maximize the shelf life of your materials by keeping air out of paint cans and tubes. Use old-Store supplies and materials properly by following the dizers, such as bleach, should be stored in a location separate rials exchange (www.rirrc.org/site/sneme)

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. gonache or watercolors. Solvents such as mineral spirits, turpentine or other paint thumers may be needed for more demanding jobs. Before you use straight solvent, 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. Ventiage the work area whenever possible to remove airborne pollulants. 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 tray-liners, 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 paim 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

in the bottom of the original container. (See the disposal paragraph below). Remember to cover all solvent containers, even while your bruntes are soaking, to reduce funnes in your work area and to prevent fire and personal exposure. Use a temporary altiminum 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 except into your work tentrement. This option should be for short term storage only white you are working with the insterials. These tops will fail to prevent spills if the container tops over. Some plastic tops are fine for solvent storage. Many point solvents are sold by the manu-facturer in plastic containers. Remember to check containers periodically to ensure they will hold up for exencised periods of time. 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 When the brush is clean, remove it and slowly pour the solvent into a clean container, being careful The best solution for long-term solvent storage is to put it back into its original container. falling to the bottom of the container.

Brush Washing dispose wipe Property S

REMEDITE excess paint then brook SCAN, the assistanted brook vertically in point thin-ons.

SETTLE pignents

DECANT the good thunce title a new container as it can be insid again

and put even small amounts of waste oil paint or solvents down the drain, because they can ultimately reach Narragansett y. Sewage treatment plants are not designed to treat these subatances. 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 climinate the need for you to obtain permits or it may reduce your permit requirements and costs

you should consider the wastes to be hazardous and dispose of them as such. They should be stored in covered and labeled fireproof wastes. If you use wipes in your cleur-up, you need to drain any liquid or solvent from them and then dispose of the wipes separate-Otherwise dispose of dry non-hazardous wipes as municipal trash. Small amounts of non-hazardous waste paint wastes generated by household sources (including non-commercial arrists) 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 frash, 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, Chcomium, Lead, Mercury, Silver, and Selenium (see Table 2 for more information). If you are using these types of materials then containers. Wipes must be handled as hazardous waste if they are saturated (dripping) with liquids that are considered huzardous Properly dispose of spent solvents, paint wastes, nerosol paint cans, and other wastes generated in your studio. Hazardous can be air-dried and also disposed of as municipal trash. ly from other trash.

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 Commercial artists are considered a small business and must abide by different regulations for hazardous waste disposal Generators" at: http://wxw.atate.ri.us/dem/programs/henviron/waate/pdf/hwgenbk.pdf, or call RIDEM at (401) 222-6800

at locations where they will be needed, and know how to use their. 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 wer-wac 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, Pick up spills promptly and then safely reuse or properly dispose of the recovered material. Keep adequately stocked spill kits 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.

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 amoking, 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. Practice good hounekeeping to promote a safe and efficient work environment. Properly manage shop towels, wipes and rags in your studio. Store wiyes that have been in contact with flammable materials (such as certain paints and solvents) in a self-closing firemation in your home, because you may track paints and dusts proof canister until ready for disposal. Wash dirty studio clothing separately from your other laundry to avoid cross-contam Be aware that your shoes can become a source of toxic metal contain

EH&S Best Management Practices for Fine Art Painting Studios

E,H & S Reference Information

Table 1 - Environmental and Health Hazards of Solvents

				Exposure	Fineh	Vepor	Water	FIRE	Fire Hazard	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
Organic Compound	EHV	WHV	HVsny	(mdd)	(F)	(mmHg)	(%)	7	ssification	Notes: Motes
Acetone	1.6	1,6	7	250	0	180	100	2	flammable	solvent, incomp, w/acids
2-Butoxyethanol	2.5	1.6	2	\$	143		100	MA	IIIA combustible	miscibility agent, skin adsorbs, incomp. w/caustics
D-Limonene	1.1	0.5	-	30	120		a	=	combustible	has citus odor
Ethyl Acetate	3.6	2.6	13 NH	400	24	73	10	8	flammable	solvent, incomp, windrates, alkalis & acids
Isoprapyl Alcohol	1.4	1.5	-	400	53	33	100	18	flammable	solvent, incomp, w/ acids and chlorine
Methyl Ethyl Ketone	3.9	1.6	のでは	200	16	78	28	B	flammable	paint remover, waste may fail TCLP, incomp, w/ anymonia
Methylene Chloride	3.3	2.8	SPECIALIZA	25	none	350	7	1	combustible	paint remover and carcinogen, TTO, ODS, skin adsorbs
Mineral Spirits	1.5	1.9	7	100	104	2	0	=	combustible	thinner, may contain 2, 8 or 22% aromatics
VM & P Naptha	1.3	1.3	-	350	40	20	0	8	flammable	may contain 1, 2 or 20% aromatics
Odorless Mineral Spirits	1.1	1.2	-	200	104		0	=	combustible	thinner, may contain up to 0.25% aromatics
Toluene	3.7	2.1	322	100	40	21	0	118	flammable	solvent, aromatic TTO, skin adsorbs
Turpentine	na	E.	F-na :	100	95	4		S	flammable	Winner, skin adsorbs, incomp. w/ chlorine
Xvlene	3.9	7	3.00	100	808	B	0	ú	flammable	arametic skin adsorbs, incomo wil strong acids

- Organic compounds, such as those listed above, can be found alone at in mixtures which are used to dilute (thin) paint, strip paint, dissolve resin, make
 inedium of for telemont. The bender and environmental values of greatest concern are bolded.
 Environmental Hazard Value (EHV) accounts for impacte on aquair ecces-steaxs, ai quality and land contamination.
 Worker Hazard Value (WHV) accounts for impacts on human leath in a work serviorament Although a low WHV is safest, the release installation.

- Average Hazord Volue (HVm), where I is safest) is equal to the average of the EHV and the WHV.
 Sever regulations probibly businesses from discluring flammable thindisk luzardous waste, solvents, paint thinner or stripper, methylene chloride, napitia, johierie, and system and also him the amount of other organic and morganic compounds that can be discharged into the sewer, much sincerstary, maximize safety by choasing one that has a high exposure limit, high flash point, low vapor pressure and a low huzard value.

Table 2 - Environmental and Health Hazards of Metals

Metal	EHV	WHV	H	NBC Imit (mg/l)	RCRA TCLP (mg/l)	PBT	Exposure Limit (mg/m²)	Carcin-	Used in P	Used in Paint Colors Including:	Notes
Arsenic	9,5	22	1523 Sec.	0.10	20		0,602	>	>	9	skin absorbs
Barlum	0.4	9.0	-	none	100		0.5		Y O WIR	B	PEL is for soluble barium compounds
Cadmium	4.1	2.4	の記ればい	0.07	-	>	0.005	>	YOHR		a PBT according to the Ecology PBT Working List
Chromium	4.7	Œ,	A 125	1.63	10		9.0	ligh	Y O Y	9 8	Hex chrome is more toxic than trivalent form
Copper	3.0	2.9	13.00	1.20	none		1,0			0 0 0	prevent skin & eye contact
Lead	4.1	2,6	953mm	0.29	2	>	0.05		Y O WIRE	5 3	prevent skin & eye contact
Mercury	4.0	1.7	11134	0.005	0.2	>	90.0		0	HI.	volatile; prevent skin contact
Nickel	4.0	2.4	1000	1.62	none		0.015	*		0	insoluble Ni compounds cardinogen per ACGIH
Selenium	2.4	6.1	2	0.20	-		0.2		>		prevent skin contact
Silver	4.4	1.9	2	0.20	'n		0.01				prevent skin & eye contact
Tin	0.1	1.8	-	2.00	none		2.0	S - 1 - 2		W.	M incompatible with turpentine
Zinc	0.4	1.7	-	1.39	none		5		۸ ۸		PEL is for zinc oxide

- -The health and environmental values of greatest concern are holded. The lowest NBC wastewoner discharge fimit for each metal is shown, The average of the Environmental (EHV) and the Worker Expasure Hazard (WHV) values is equal to the Average Hazard Value (HVavg, where I 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 culcium, aluminum and iron
 The risk of inhaling metals are highest for fine art painting, operations involving spray painting, airbrusting, sanding, dry powders &
- Other metals of concern that can be found in oil, watercolor and other paints include antinony, coholt, manganese, malybdate, strontium and titamum chalks and torching.

EH&S Best Management Practices for Fine Art Painting Studios

Useful Information and Definitions

Corrosings Courosis es are acids (e.g., minre acid, hydrochloric acids or (erric chloride) that have a pH below 2 and alkalis (e.g. sodium hydroxide or Ive) that have a pH above 12.5 standard units

Environmental, Health and Safety (EH&S) agendas project our envi-ronments and human health. Note that certain substances that are rela-tively safe to work with may still be harmful to the environment.

Flash Point is the fowest temperature at which a solvent will flame when an ignition source is present. Halagenated compounds contain chiorine, bromine of flurine, In the upper atmosphere, halogenated organic compounds are most notorious for being azone depleting substances (ODS). Certain halogenated compounds are also direct (i.e. methy) chlosoform) or indirect (i.e. methy)ene chloride) greenhouse gases (GHO). Many halogenated srganic compounds are carcinogens and do not have a flash point Material Safetz Data Sheet (MSDS) chemical manufacturors supply a MSDS to inform industrial purchasers and users of hazardaus chemicals of the reasonably foreseeable physical and chemical inexards that may arrsa from the use of those chemicals

Oxidizing compound is a reactive chemical such as bleach, chloring hydrogen peraxide and Permissible Exposure Limit (PEL) is the maximum concentration of a chemical in air that a worker can be exposed to without health conse-

Persistent Bioaccumulative Toxics (PBT) are highly toxic compounds that last a foug time and build-up to high levels in the Food chain

Publicly Owned Trentment Works (POTM) is a sewage treatment

Resource Conservation and Recovery Act. (RCRA) is the federal law that governs the disposal of hazardous waste Solvent is a typically volatile, organic (alightatic, aromatic or instalurated) liquid capable of dissolving other compounds such as paints, oils or restus. Organic solvents are mecompatible with exidizors

Total Toxic Organics (TTO), including methylene chloride and toluene, are listed in 40 CFR Section 433.11te), Total Toxic Organics definition (Appendix 9.1) Texicity Characteristic Leaching Procedure (TCLP) is one of the tests for 4th compounds that can characterize a waste as hazardous

evaporate. An organic compound with a vapor pressure over 2 mmHg is Vapor Pressure is a direct indication of how quickly a substance will

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32 · ·

Volatile Organic Compounds (VQCs), especially arranges (i.e., toluene and xylene) that are the most photochemically reactive VQCs, are notations for easiing smog (come in the lower atmosphere). Certain VOCsare also direct (i.e. ether) or indirect (i.e. aromatics) greenhouse

RI Agencies Providing Further Information

Narragansett Bay Commission (NBC) (401) 461-8848 - www.nerrabay.com

RI Department of Environmental Management (RIDEM) (401) 222-6822 - www.state.ni.usidem RI Dept. of Health, Occupational

www.health.state.n.us/environment/occupational/Home.htm Health & Safety Consultation Services (401) 222-2438 -

RI Resource Recovery Corporation (RIRRC) (401) 942-1430 - www.rirrc.org

hts/default.asp? department=Environmental Health and Safety RI School of Design (RISD) (401) 454-6780 - http://intranet.risd.edu/departr

RI State Council on the Arts (RISCA) (401) 222-3880 - www.risca.state rt us

Other Agencies

Art and Creative Materials Institute (ACMI) (617) 426-6639 - www.acminet.org

Arts, Crafts, and Theater Safety (ACTS) (212) 777-0062 - www caseweb confacts Massachuserts and Rhode Island Poison Center (800) 222-1212 - www.maripoisoncenter.com National Institute for Occupational Safety and Health (NIOSII)

(800) 356-5674 - www.niash.com

Occupational Safety and Health Administration (OSHA) (202) 523-7075 - www.osha.gov

(800) 424-9346 - www.epa.gov/epaoswes/tothne RCRA Hoffine



This boschine was finisted in part by a US EPA Region I grant and the Naviogaisent Ray Commission and was produced by a working group of art and environmental professionals including. Pemeta Galli (RD)EM), Alan Cantura (RSE), Rafine Caello (NBC). Kathie Flowshein (Photographar), Rebecca Powa (NED), Randall Rosenbaam (RDSA), and Barry Weischwitz (NBC).

Narragansett Bay Commission One Service Road Providence, RI 02905



NARRAGANSETT BAY COMMISSION Environmental, Health & Safety



FINE ART PAINTING STUDIOS



Printed on recycled pa

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: P1112-238-0222

Company Name: **G. TANURY PLATING COMPANY**Facility Address: 100 Railroad Avenue, Johnston, RI 02919
Mailing Address: 100 Railroad Avenue, Johnston, RI 02919

Facility President: Mr. George T. Tanury

Facility Authorized Agents: Mr. George T. Tanury, Mr. Kenneth Cabral, Mr. Joe Bascetta

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. George T. Tanury and G. Tanury Plating 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 21 pages with conditions A - W.

This permit becomes effective on March 1, 2017 and expires on February 28, 2022.

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 February 24, 2017

Kerry M. Britt, Pretreatment Manager Date

Kerry M. Britt, Pretreatment Manager Narragansett Bay Commission

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).

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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 agrees that the average discharge per calendar day of electroplating process wastewater is greater than or equal to 50,000 gallons but less than 100,000 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 an Metal Finisher and, therefore, must at all times comply with EPA Categorical Regulations 40 CFR §433.17, Pretreatment Standard 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 monthly average limitation of 0.65 ppm at the combined point of cyanide process discharge, prior to combining with non-cyanide treatment system. Upon conducting an engineering review of the facility, it has been determined that all wastewater discharging to the cyanide destruct tank has the potential to be contaminated with cyanide. A sampling location must be installed downstream of the cyanide destruct tank. The EPA Total Cyanide Metal Finishing limitations will be enforced at this sampling location. The NBC 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 Non-Cyanide Bearing Metal Finishing Rinsewaters;
 - b. Treated Cyanide Bearing Metal Finishing Rinsewaters;
 - c. Treated Electrocleaner Solutions;
 - d. Treated Alkaline Etch Solutions;
 - e. Treated Alkaline Soak Solutions;
 - f. Treated Soap Solutions;
 - g. Treated Ultrasonic Solutions;
 - h. Treated 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. Degreasing Solutions;
 - f. Solvents:
 - g. Sludges;
 - h. 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 19, attached hereto and incorporated herein.
- 3. The permittee may only treat and/or discharge those solutions that were indicated as such on plans submitted to the NBC by the permittee on March 9, 2006. 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 twenty-one (21) sample locations must be provided and must collect wastewater from the process operations indicated as follows:
 - Sample Location #1 The main drain at the end of the plating room trench, collecting all process discharges specified in Section B(1)(a through h) of this permit.
 - Sample Location #2 Sample port on the cyanide destruct discharge line, collecting all process discharges specified in Section B(1)(b) of this permit.
 - Sample Location #3 Tank 1, Electrocleaner, collecting all process discharges specified in Section B(1)(c) of this permit.
 - Sample Location #4 Tank 15, Electrocleaner, collecting all process discharges specified in Section B(1)(c) of this permit.
 - Sample Location #5 Tank 147, DI Dragout, collecting all process discharges specified in Section B(1)(a) of this permit.
 - Sample Location #6 Tank 54, Electrocleaner, collecting all process discharges specified in Section B(1)(c) of this permit.
 - Sample Location #7 Tank 157, Ultrasonic, collecting all process discharges specified in Section B(1)(g) of this permit.
 - Sample Location #8 Tank 195a, DI Dragout, collecting all process discharges specified in Section B(1)(a) of this permit.
 - Sample Location #9 Tank 81, Alkaline Soak, collecting all process discharges specified in Section B(1)(e) of this permit.
 - Sample Location #10 Tank 184, Soap, collecting all process discharges specified in Section B(1)(f) of this permit.
 - Sample Location #11 Tank 83, Electrocleaner, collecting all process discharges specified in Section B(1)(c) of this permit.

- Sample Location #12 Tank 195b, DI Dragout, collecting all process discharges specified in Section B(1)(a) of this permit.
- Sample Location #13 Tank 78, Alkaline Soak, collecting all process discharges specified in Section B(1)(e) of this permit.
- Sample Location #14 Tank 110a, Soap, collecting all process discharges specified in Section B(1)(f) of this permit.
- Sample Location #15 Tank A, Soap, collecting all process discharges specified in Section B(1)(f) of this permit.
- <u>Sample Location #16</u> Tank 135, Electrocleaner, collecting all process discharges specified in Section B(1)(c) of this permit.
- Sample Location #17 Tank 137, Soap, collecting all process discharges specified in Section B(1)(f) of this permit.
- Sample Location #18 Tank 150, Soap, collecting all process discharges specified in Section B(1)(f) of this permit.
- Sample Location #19 Tank 141, Ultrasonic, collecting all process discharges specified in Section B(1)(g) of this permit.
- Sample Location #20 Tank 142, Ultrasonic, collecting all process discharges specified in Section B(1)(g) of this permit.
- Sample Location #21 Tank 183, Electrocleaner, collecting all process discharges specified in Section B(1)(c) 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. The discharge through Sample Location #2 must be in compliance with the EPA Metal Finishing Standards referenced in Section A(5). The discharge through Sample Locations #3 through #21 must be in compliance with the concentrated discharge formula referenced in Article 2 of the NBC Rules and Regulations.

2. The permittee shall operate and maintain a pretreatment system in conformance with plans submitted to the NBC on May 31, 1995, January 4, 2002, March 20, 2003 and May 3, 2004. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.

3. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.

E. Boiler Facility Requirements:

- 1. The permittee has permanently sealed all open floor drains and any other open process wastewater and sewer discharge connections within the boiler facility and must maintain all such seals so as to prevent an incidental or accidental discharge from the boiler room.
- 2. The permittee has permanently sealed all drains within oil storage tank vaults or located under buried tanks which connect to the sewer and must maintain all such seals so as to prevent an incidental or accidental discharge.
- 3. The permittee is strictly prohibited from discharging 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. 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 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 main drain at the end of the plating room trench, Sample Location #1. The composite samples collected in April and October are to be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total) Lead (Total) Silver (Total)
Chromium (Total) Nickel (Total) Zinc (Total)
Copper (Total)

The composite samples collected during all other sampling months are to be collected, preserved, and analyzed in accordance with EPA protocols for the following parameters:

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 main drain at the end of the plating room trench, 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.
- c. 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 over the entire operating day from the combined point of discharge of the cyanide bearing rinsewaters, Sample Location #2, prior to combining with any other noncyanide bearing wastestream. 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 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. This sample must be in compliance with the EPA Metal Finishing Total Cyanide Standards referenced in Section A(5) of this permit.

d. The permittee has indicated through plans submitted on March 9, 2006 that certain solutions are regularly discharged into the NBC sewer system without pretreatment. The permittee must collect and preserve a grab sample from each of the following tanks once the solution is depleted and just prior to discharge during the months indicated and analyze each grab sample in accordance with EPA protocols separately for the indicated parameters:

Month	Sample Location #	<u>Tank</u>	Solution	Parameters
January	3	Tank 1	Electrocleaner	Copper, Lead, Nickel, Zinc
February	4	Tank 15	Electrocleaner	Copper, Lead, Nickel, Zinc
February	5	Tank 147	DI Dragout	Copper, Lead, Nickel, Zinc
March	6	Tank 54	Electrocleaner	Copper, Lead, Nickel, Zinc
April	7	Tank 157	Ultrasonic	Copper, Lead, Nickel, Zinc
April	8	Tank 195a	DI Dragout	Copper, Lead, Nickel, Zinc
May	9	Tank 81	Alkaline Soak	Copper, Lead, Nickel, Zinc
May	10	Tank 184	Soap	Copper, Lead, Nickel, Zinc
June	11	Tank 83	Electrocleaner	Copper, Lead, Nickel, Zinc
June	12	Tank 195b	DI Dragout	Copper, Lead, Nickel, Zinc
July	13	Tank 78	Alkaline Etch	Copper, Lead, Nickel, Zinc
August	14	Tank 110a	Soap	Copper, Lead, Nickel, Zinc
August	15	Tank A	Soap	Copper, Lead, Nickel, Zinc
September	16	Tank 135	Electrocleaner	Copper, Lead, Nickel, Zinc
October	17	Tank 137	Soap	Copper, Lead, Nickel, Zinc
October	18	Tank 150	Soap	Copper, Lead, Nickel, Zinc
November	19	Tank 141	Ultrasonic	Copper, Lead, Nickel, Zinc
December	20	Tank 142	Ultrasonic	Copper, Lead, Nickel, Zinc
December	21	Tank 182	Electrocleaner	Copper, Lead, Nickel, Zinc

If the tank is not discharged during the required sampling month, the permittee must notify the NBC in writing and sample during the next discharge of the tank. The discharge from each of these tanks must be in compliance with the NBC concentrated discharge formula, referenced in Article 2 of the NBC Rules and Regulations. If the tank contents are used as a pH adjustment chemical, the permittee agrees that compliance with the NBC concentrated discharge formula will be determined based upon the assumption that the entire tank contents were discharged on the operating day.

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.

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. Completed manifest forms for hazardous materials;
 - c. A listing of all batch discharges including the date of the discharge and a description of the tank from which the discharge occurred;
 - 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 a logbook documenting all records pertaining to the boiler operation including, but not limited to, the following:
 - a. A listing of each boiler facility blowdown visual inspection documenting the date, time, person conducting the blowdown and the appearance of the blowdown. This procedure ensures that a prohibited material is not discharged;
 - b. A listing of the date of each fuel tank filling.
- 3. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

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 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, 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.

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. G. Tanury Plating Company shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event G. Tanury Plating 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 G. Tanury Plating 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 G. Tanury Plating 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:

- 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:
 - 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.

NPD:NJD:smb

Attachments:

Self-Monitoring Compliance Report Form Continuous pH Monitoring Report Form Designation of Authorized Agent Form RCRA Handbook Twenty-four (24) Hour Violation Notification Fax Form List of Licensed Laboratories List of Toxic Organic Compounds

Table 1

NBC Effluent Discharge Limitations Field's Point District

<u>Parameter</u>	Limitation (Max)
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

G. Tanury Plating Company Sampling Requirements

		Sample Location #1	Sample Location #2			
		the Main Drain at the Tthe Plating Room Trench		ample Port on the Destruct Discharge Line		
Month	Composit e Sample	Parameters	Composite Sample	Parameters		
January	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
February	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
March	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
April	X	Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN	X	EPA-CN		
May	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
June	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
July	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
August	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
September	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
October	X	Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN	X	EPA-CN		
November	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		
December	X	Cu, Ni, Ag, Zn, CN	X	EPA-CN		

Legend

Cd - Cadmium

Cr - Chromium

Cu - Copper

CN - Cyanide

EPA-CN - EPA Cyanide

Pb - Lead

Ni - Nickel

Ag - Silver

Zn - Zinc

Table 2 (cont'd)

G. Tanury Plating Company Sampling Requirements

Sample Locations #3 through #21

Assorted Process Tanks

				120001111		•		
Month	Grab Sample*	Sample Location	Tank #	Parameters	Grab Sample *	Sample Location	Tank #	Parameters
January	X	#3	1	Cu, Pb, Ni, Zn				
February	X	#4	15	Cu, Pb, Ni, Zn	X	#5	147	Cu, Pb, Ni, Zn
March	X	#6	54	Cu, Pb, Ni, Zn				
April	X	#7	157	Cu, Pb, Ni, Zn	X	#8	195a	Cu, Pb, Ni, Zn
May	X	#9	81	Cu, Pb, Ni, Zn	X	#10	184	Cu, Pb, Ni, Zn
June	X	#11	83	Cu, Pb, Ni, Zn	X	#12	195b	Cu, Pb, Ni, Zn
July	X	#13	78	Cu, Pb, Ni, Zn				
August	X	#14	110a	Cu, Pb, Ni, Zn	X	#15	A	Cu, Pb, Ni, Zn
September	X	#16	135	Cu, Pb, Ni, Zn				
October	X	#17	137	Cu, Pb, Ni, Zn	X	#18	150	Cu, Pb, Ni, Zn
November	X	#19	141	Cu, Pb, Ni, Zn				
December	X	#20	142	Cu, Pb, Ni, Zn	X	#21	182	Cu, Pb, Ni, Zn

Legend

Cd - Cadmium

Cr - Chromium

Cu - Copper

CN - Cyanide

EPA-CN - EPA Cyanide

Pb - Lead

Ni - Nickel

Ag - Silver

Zn - Zinc

*These grab samples are to be collected on the same day that the composite sample is collected and tank is to be discharged while composite sample is being collected.

CERTIFICATE TO DISCHARGE

the following types of process water:

TREATED METAL FINISHING WASTEWATERS

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

G. Tanur	y Plating Company
100 Railr	oad Avenue
Johnston.	RI 02919
PERMIT 1	NUMBER: P1112-238-0222
PERMIT 1	EXPIRATION DATE: 02/28/2022

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 24, 2017
Initial Date of Issuance

/s/ Kerry M. Britt
Kerry M. Britt, Pretreatment Manager

TYPICAL PHARMACEUTICAL WASTEWATER DISCHARGE PERMIT



WASTEWATER DISCHARGE PERMIT

Permit Number: B1404-018-0322

Company Name: DENISON ACQUISITION COMPANY, LLC D/B/A

DENISON PHARMACEUTICALS, LLC

Facility Address: 1 Powder Hill Road, Lincoln, RI 02865 Mailing Address: 1 Powder Hill Road, Lincoln, RI 02865

Facility President: Mr. Bradley S. Stone

Facility Authorized Agents: Mr. Alfred Silva, Mr. Victor Maia User Classification: Pharmaceutical Manufacturing Operations

Categorical Standards Applicable: 40 CFR §439.47, Pretreatment Standards for New Sources

By virtue of Rhode Island's General Laws Title 46 Chapter 25 (Act) and in accordance with the Rules And Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District (Rules and Regulations), **Mr. Bradley S. Stone and Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 19 pages with conditions A - V.

This permit becomes effective on April 1, 2017 and expires on March 31, 2022.

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 Manager March 31, 2017

Kerry M. Britt, Pretreatment Manager Date

Kerry M. Britt, Pretreatment Manager Narragansett Bay Commission

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).

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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.
- The permittee is classified as a pharmaceutical manufacturing firm and therefore must at all 4. times comply with EPA Categorical Regulations 40 CFR §439.47, Subpart D, Pretreatment Standards for New Sources. EPA regulations require pharmaceutical manufacturers to maintain full compliance with the maximum daily discharge limit of 20.7 ppm and the monthly average of 8.2 ppm for n-amyl acetate, ethyl acetate, and isopropyl acetate. Subpart D of the pharmaceutical regulations also requires categorical pharmaceutical manufacturers to maintain full compliance with the maximum daily discharge limit of 3.0 ppm and the monthly average limit of 0.7 ppm for methylene chloride. NBC discharge limits for the Bucklin Point Treatment Facility do not exist for n-amyl acetate, ethyl acetate, and isopropyl acetate. The categorical limits are therefore in effect for these parameters. Methylene chloride and acetone are included in the NBC list of Total Toxic Organics and must meet the more stringent local limit of 2.13 mg/L. NBC discharge limits for all other parameters in this permit are more stringent than the EPA categorical limitations. Therefore, NBC local limits will be applied and enforced for all other parameters.

B. Permitted Discharges:

- 1. The permittee is authorized to discharge the following tanks, solutions or process wastewater streams to the NBC facilities:
 - a. Treated Process Tank Washwater;
 - b. Treated Laboratory Glassware Washwater;
 - c. Reverse Osmosis Reject Wastewater;

- d. Carbon Filter Backwash;
- e. Softener Regenerant Wastewater;
- f. Treated Air Compressor Condensate;
- g. Non-Contact Cooling Water.
- 2. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

C. Prohibitions:

- 1. The permittee is strictly prohibited from discharging any prohibited substances detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
 - a. Off-specification Product Batches;
 - b. Concentrated Raw Materials and Solutions;
 - c. Acidic Solutions with a pH less than 5.0 standard units;
 - d. Caustic Solutions with a pH greater than 11.0 standard units;
 - e. Degreasing Solutions;
 - f. Solvents;
 - g. Sludges;
 - h. Fuel or Lubricating Oils;
 - i. Laboratory Chemicals.
- 2. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) of this permit or wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 17, attached hereto and incorporated herein.
- 3. The permittee may only treat and/or discharge those solutions that were indicated as such on plans submitted to the NBC by the permittee on February 13, 2012. The permittee is strictly prohibited from discharging any other tanks, solutions, chemicals or materials, including all prohibited substances as defined in the Rules and Regulations of the Narragansett Bay Commission, without written approval from the NBC.
- 4. The permittee is strictly prohibited from using portable pumps and/or flexible hose to transfer solutions directly to the pretreatment system or to bypass the pretreatment system and/or discharge solutions directly to the sewer without written approval from the NBC.

D. Pretreatment Requirements:

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of one sample location must be provided and must collect wastewater from the process operations indicated as follows:

<u>Sample Location #1</u> - Effluent monitoring station, collecting all process discharges specified in Section B(1)(a and b) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location. The discharge through Sample Location #1 must be in compliance with the effluent limitations specified in Section A and Table 1 of this permit and with the EPA Pharmaceutical Manufacturing Standards referenced in Section A(4) of this permit.

- 2. The permittee shall provide additional pretreatment of the process wastewater discharges listed in Section B(1) above if determined necessary by the NBC to ensure that effluent limitations are met at all times. Plans of additional pretreatment systems must be submitted to the NBC for approval before beginning construction.
- 3. The permittee shall operate and maintain a pretreatment system in conformance with plans submitted to the NBC on February 13, 2012. This pretreatment system shall be fully operational whenever process discharges to the sewer occur.
- 4. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.

E. Monitoring Requirements:

1. The permittee shall monitor the final pH, and volume of each treated batch discharge and shall record the data in the pretreatment system logbook referenced in Section F(1) of this permit. The final pH, and volume of each batch discharge is to be reported to the NBC monthly on a summary report within thirty (30) days from the end of the month in which the data was recorded. (See sample copy enclosed).

- 2. During the months of January, April, July, and October, until the expiration date of this permit, the permittee must conduct sampling from the effluent monitoring station, Sample Location #1, while a batch discharge is occurring.
 - a. During the months of January, April, July, and October, one grab sample is to be collected in a glass container having a total volume greater than 20 ml. The grab sample must be preserved immediately upon sample collection in accordance with EPA Regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If the sample is known to contain residual chlorine, add sodium thiosulfate preservative (10 mg/40ml) to the empty sample bottles just prior to shipment to the sample site. If the sample is tested and residual chlorine is present then 0.008% by volume of sodium thiosulfate must be added (i.e., 2 mg per 25 ml of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate should be repeated. Once chlorine residual has been eliminated from the sample, the sample should be stored in the dark and refrigerated at a temperature of 0-4° C until analysis. No air bubbles may be present in any grab sample or that sample must be discarded. The grab sample is to be analyzed within fourteen (14) days of collection by EPA Method 1666 for the following Volatile Organic Compounds specific to the Pharmaceutical Manufacturing Industry:

n-Amyl acetate
Ethyl acetate
Isopropyl acetate
Methylene Chloride

b. During the months of January, April, July, and October, during the same batch discharge that samples in Section E(2)(a) are collected, one grab sample is to be collected, preserved, and analyzed in accordance with analytical method number D3695, D4763, 524.2, or 1624 and with EPA protocols for the following parameter:

Acetone

c. During the months of April and October, during the same batch discharge that samples in Section E(2)(a) are collected, one grab sample is to be collected in a glass bottle with a Teflon lined cap with a volume of either 25 or 40 ml. The grab sample must be preserved immediately upon sample collection in accordance with EPA Regulations. The grab sample must immediately be tested for residual chlorine with potassium iodide paper. If residual chlorine is present in the sample, then 0.008% by volume of sodium thiosulfate must be added (i.e., 2 mg per 25 ml of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate should be repeated. Once chlorine

residual has been eliminated from the sample, the sample should be stored in the dark and refrigerated at a temperature of 0-4° C until analysis. No air bubbles may be present in the grab sample or that sample must be discarded. The grab sample is to be analyzed within three (3) days of collection for the **Volatile Organic Compounds (purgeables)** fraction of the Total Toxic Organics (TTO) list enclosed.

- d. During the months of April and October, during the same batch discharge that samples in Section E(2)(a) are collected, one grab sample is to be collected in a 1000 ml (minimum) glass amber bottle with a Teflon lined cap. The grab sample must be preserved immediately upon sample collection according to EPA Regulations. The sample must be tested for residual chlorine with potassium iodide paper. If chlorine residual is present in the sample, 0.008% by volume of sodium thiosulfate must be added (i.e., 80 mg per liter of sample collected). The sample should then be retested for chlorine residual; if it is present, the addition of sodium thiosulfate shall be repeated. Once chlorine residual has been eliminated from the sample, the pH of the sample must be adjusted to between 6.0 and 9.0 standard units and the sample must be stored in the dark until analysis. The sample must be extracted within seven (7) days of collection and must be analyzed within forty (40) days of extraction for the **Acid, Base and Neutral fraction** of the Total Toxic Organics (TTO) list enclosed.
- e. During the months of January, April, July, and October, until the expiration date of this permit, one grab sample must be collected in a glass bottle. The samples collected during April and October must be collected from the same batch discharge that is being sampled in Section E(2)(a). The sample must be collected and preserved according to EPA protocols and must be analyzed for the following parameter:

Total Oil and Grease (fats, oils, and grease)

f. During the months of January, April, July, and October, until the expiration date of this permit, the permittee must collect one grab sample. The samples collected during April and October must be collected from the same batch discharge that is being sampled in Section E(2)(a). The grab sample is to be collected, preserved, and analyzed according to EPA protocols for the following parameters:

Copper (Total) Zinc (Total)

g. During the months of January, April, July, and October, until the expiration date of this permit, the permittee must collect one grab sample. The samples collected during April and October must be collected from the same batch discharge that is being sampled in Section E(2)(a). The grab sample is to be collected, preserved, and analyzed according to EPA protocols for the following parameter:

Biochemical Oxygen Demand (BOD) Total Suspended Solids (TSS)

Table 3 attached hereto summarizes the sampling requirements for this facility.

- 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. Amount of chemicals used on a monthly basis to provide pretreatment;
 - b. Amount of sludge generated on a monthly basis;
 - c. Completed manifest forms for hazardous materials;
 - d. A listing of all batch discharges including the date of the discharge and a description of the tank from which the discharge occurred;
 - e. The amount of chemicals added to provide pretreatment of batch discharges;
 - f. pH and chlorine residual readings taken during the course of providing batch treatment of any process wastewater and the amount of sludge generated, where applicable;
 - g. Maintenance performed on the pretreatment system including weekly probe cleaning, monthly probe calibration and other maintenance requests specified by inspectors of the NBC.
- 2. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

G. Spill and Slug Prevention Control Plan:

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

H. Toxic Organic/Solvent Management Plan:

The permittee must ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

I. Emergency/Routine Notification Requirements:

1. Emergency Notification of Accidental/Incidental Discharge

In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR 403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 434-6350. Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

3. Routine Notification of Pretreatment Equipment Malfunctions

In the event of pretreatment equipment failure or malfunction, the permittee must notify the NBC of the incident by the close of the next full business day by calling the NBC's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

- a. pH monitoring equipment failure;
- b. pH probe failure;
- c. pH chart recorder failure;
- d. Chemical feed pump failure;
- e. Pretreatment system pump, filter, or mixer failure.

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

J. Right of Entry:

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

K. Permit Fee:

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

L. Authorization To Do Business:

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a co-permittee or any individual exercising ownership of Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC shall be subject to the terms and conditions of the permit as if named herein.

M. Closing, Selling, Moving the Business:

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

N. Transfer of Permit Prohibited:

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

O. Permit Violations:

1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

P. Revocation/Suspension of Permit:

- 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;
 - 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;
 - 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;
 - 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;
 - To reflect transfer of the facility ownership and/or operation to a new owner/operator;
 - j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

2. If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

U. Integration:

This permit represents the entire agreement and understanding of the parties hereto to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This permit may not be modified or altered except in accordance with the provisions of Article 8 of the Rules and Regulations. All terms used in this permit shall be construed as defined under Article 2 of the Rules and Regulations.

V. Jurisdiction:

This permit shall be administered and interpreted under the laws of the State of Rhode Island. Jurisdiction of litigation arising from this permit shall be in the State of Rhode Island. If any part of this permit is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said law, but the remainder of this permit shall be in full force and effect.

NPD:NJD:smb

Attachments:

Self-Monitoring Compliance Report Form
Batch pH Monitoring Report Form
Designation of Authorized Agent Form
RCRA Handbook
Twenty-four (24) Hour Violation Notification Fax Form
List of Licensed Laboratories
List of Toxic Organic Compounds

Table 1

NBC Effluent Discharge Limitations Bucklin Point District

<u>Parameter</u>	Limitation (Max)
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	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

<u>Denison Acquisition Company, LLC d/b/a</u> <u>Denison Pharmaceuticals, LLC</u>

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

Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC Sampling Requirements

Sample Location #1

Effluent Monitoring Station

Month	Grab Sample	Parameters	
January	X	Cu, Zn, O&G, Acetone, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Methylene Chloride, BOD, TSS	
February			
March			
April	X	Cu, Zn, O&G, VOC, EXT, Acetone, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Methylene Chloride, BOD, TSS	
May			
June			
July	X	Cu, Zn, O&G, Acetone, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Methylene Chloride, BOD, TSS	
August			
September			
October	X	Cu, Zn, O&G, VOC, EXT, Acetone, n-Amyl Acetate, Ethyl Acetate, Isopropyl Acetate, Methylene Chloride, BOD, TSS	
November			
December			

Legend

Cd - Cadmium	Pb - Lead	BOD - Biochemical Oxygen Demand
Cr - Chromium	Ni - Nickel	TSS - Total Suspended Solids
Cu - Copper	Ag - Silver	O&G - Total Oil and Grease (fats, oils, and grease)
CN - Cyanide	Zn - Zinc	VOC - Volatile Organic compounds Portion of TTO List
•		EXT - Extractable Portion of TTO List

CERTIFICATE TO DISCHARGE

the following types of process water:

TREATED PROCESS TANK WASHWATER, LABORATORY GLASSWARE WASHWATER, REVERSE OSMOSIS WASTEWATER, AIR COMPRESSOR CONDENSATE, NON-CONTACT COOLING WATER

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

Denison Acquisition Company, LLC d/b/a Denison Pharmaceuticals, LLC

1 Powder Hill Road

Lincoln, RI 02865

PERMIT NUMBER: B1404-018-0322

PERMIT EXPIRATION DATE: 03/31/2022

The discharge permit must be kept at the above address for inspection. Failure to comply with the rules and regulations of the Narragansett Bay Commission or with the conditions of the discharge permit will subject the permittee to fines of up to \$25,000 per violation per R.I.G.L. 46-25-25.3.

March 31, 2017 /s/ Kerry M. Britt

Initial Date of Issuance 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 April 26, 2013

Kerry M. Britt, Pretreatment Manager Date

Kerry M. Britt, Pretreatment Manager Narragansett Bay Commission

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).

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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;
- 1. 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;
 - 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 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;
 - 1. 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)

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 copermittee 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:

- 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;
 - 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;
 - 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;
 - 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;
 - 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

Parameter Total Toxic Organics (TTO)	<u>Limitation (Max)</u> 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/1</u>)	Monthly Average Concentration (<u>mg/1</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

<u>US EPA Effluent Discharge Limitations for</u> <u>Parameters with Categorical Standards</u>

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

	Sample Location #1 Sample Port on the Discharge Line of the Final pH Adjustment Tank		Line o	Sample Location #2 ple Port on the Discharge of the Oil/Water Separator the Mechanical Room
Month	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 O&G - Total Oil and Grease (fats, oils, and grease) Pb - Lead

Cr - Chromium Ni - Nickel Cu - Copper CN - Cyanide Ag - Silver 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) Maximum for Monthly Average Day	
	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 fo	r Heat Treatment	Contact Cooling Water	
Pollutant or Pollutant Property	Maximum for Any One (1) Maximum for Monthly Average Day		
	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 f	or Shot Casting C	Contact Cooling Water	
Pollutant or Pollutant Property	Maximum for Any One (1) Maximum for Monthly Average Day		
	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)

<u>Tiffany and Company</u> <u>Basis for EPA Discharge Limitations</u>

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 Co	ompany		
300 Maple Ric	dge Drive		
Cumberland, I			
PERMIT NUM	MBER: B1506-016-0	418	
	IRATION DATE: 0	/ /	_
	<u> </u>	3,2010	

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 /s/ Kerry M. Britt
Initial Date of Issuance Kerry M. Britt, Pretreatment Manager

TYPICAL STEAM ELECTRIC POWER GENERATOR WASTEWATER DISCHARGE PERMIT



WASTEWATER DISCHARGE PERMIT

Permit Number: B1604-008-0422

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: Mr. Dwayne Dychkowski

Facility Authorized Agents: Mr. Todd Annarummo, 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. Dwayne Dychkowski and Pawtucket Power Associates, L.P.**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 20 pages with conditions A - W and Attachment A.

This permit becomes effective on May 1, 2017 and expires on April 30, 2022.

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

April 28, 2017

Date

Kerry M. Britt, Pretreatment Manager Narragansett Bay Commission

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

2

A. Effluent Discharge Limitations:

- 1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 18, attached hereto and incorporated herein.
- 2. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
- 3. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
- 4. The permittee is classified as a Steam Electric Power Generator and, therefore must at all times comply with EPA Categorical Regulations 40 CFR §423.17, Pretreatment Standards for New Sources. EPA regulations require that Steam Electric Power Generators maintain full compliance with the EPA Total Copper maximum limit of 1.0 ppm for chemical metal cleaning wastes. In addition, EPA regulations require that the 126 pollutants listed in Table 2 of this permit shall not be discharged in any detectable amount in cooling tower blowdown as a result of cooling tower chemical additives, with exception to Total Chromium and Total Zinc. Cooling tower wastestreams contaminated with Chromium or Zinc as a result of chemical additives must be in full compliance with the EPA Total Chromium maximum limit of 0.2 ppm and the EPA Total Zinc maximum limit of 1.0 ppm for all cooling tower blowdown discharges. To demonstrate compliance with this requirement, the permittee may conduct an engineering study to verify that the chemicals added to the cooling tower will not result in the 126 pollutants listed in Table 2 of this permit being detectable in the cooling tower blowdown. If the engineering study is submitted and determined to be acceptable to the NBC, then the NBC local discharge limitations specified in Table 1 would become more stringent and the permittee must then maintain full compliance with these limits.
- 5. EPA Categorical Standards require that 126 Pollutants listed in Table 2 of this permit shall not be discharged in any detectable amount in the cooling tower blowdown as the result of cooling tower chemicals added. In lieu of monitoring, the permittee last submitted an engineering study in August 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. A revised study must be completed and received by May 30, 2017. 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 (HRSG) Blowdown;
 - c. Auxiliary Boiler Blowdown;
 - d. Equipment Washdown;
 - e. Floor Washdown;
 - f. Carbon Filter Backwash;
 - g. 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 F(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 F(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 18, 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, d, and e) 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)(f) of this permit.
 - $\label{eq:sample Location #4 Sample port on the discharge pipe of the cooling tower, collecting all process discharges specified in Section B(1)(g) of this permit.}$
 - $\label{eq:sample_location} \begin{array}{ll} \underline{Sample\ Location\ \#5} \ -\ Sample\ port\ on\ the\ discharge\ pipe\ of\ the\ heat\ recovery\ steam} \\ &\ generator\ blowdown\ line,\ collecting\ all\ process\ discharges \\ &\ specified\ in\ Section\ B(1)(b\ and\ c)\ of\ this\ permit. \end{array}$

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. 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.

F. Monitoring Requirements:

1. The permittee shall monitor the pH of the effluent discharge through Sample Locations #1 and #2 and record it continuously. The permittee shall report the results monthly in a summary report for each location giving the maximum, minimum and average pH readings for each day of operation (see sample copy enclosed). The data must be reported directly from the recording chart to an accuracy of 0.1 standard units. The pH Monitoring Reports must be received by the NBC within thirty (30) days from the end of the month in which the data is recorded. The original recording charts must be maintained on site for a period of at least three (3) years.

- 2. The permittee shall conduct sampling over one (1) full normal operating day during the months of January, April, July, and October, until the expiration date of this permit.
 - a. A composite sample is to be collected which must consist of equal volume grab samples collected at least every half hour over the operating day or collected continuously with a composite sampler. The samples are to be collected from the sample port on the effluent discharge pipe of the oil/water separator, Sample Location #1. The composite samples are to be collected, preserved and analyzed in accordance with EPA protocols for the following parameters:

Cadmium (Total) Copper (Total) Nickel (Total) Chromium (Total) Lead (Total) Zinc (Total)

b. On the same day that the composite sampling listed in Section F(2)(a) is being conducted, the permittee shall collect four (4) grab samples from the sample port on the effluent discharge pipe of the oil/water separator, Sample Location #1. The grab samples must be collected in glass bottles, preserved and analyzed separately in accordance with EPA protocols for the following parameter:

Total Oil and Grease (fats, oils and grease)

The mathematical average of the four grab samples will be used to determine compliance with the NBC discharge limitation for Total Oil and Grease (fats, oils, and grease).

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 sample 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 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'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.

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. 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 probe cleaning and 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. 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.

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 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.

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 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.

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:

- 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;
 - 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;
 - 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;
 - 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;
 - 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.

KL:AB:smb

Attachments:

Self-Monitoring Compliance Report Form
Continuous pH Monitoring Report Form
Designation of Authorized Agent Form
RCRA Handbook
Twenty-four (24) Hour Violation Notification Fax Form
List of Licensed Laboratories
List of Toxic Organic Compounds

Table 1

NBC Effluent Discharge Limitations Bucklin Point District

Parameter	Limitation (Max)
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.

Daily Maximum Parameter Monthly Average Concentration Limit Concentration (mg/1)(mg/1)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.

<u>Table 2</u> <u>List of 126 Priority Pollutants</u> <u>40 CFR §423.17 Appendix A</u>

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*	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	butylbenzul phthalate	endrin aldelyde
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	Dalvahlaninatad Dinhanyla
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 (as azobenzene)	Other Toxic Pollutants and Total Phenol
	fluoranthene*	Antimony, Total
Acid Compounds	fluorene*	Arsenic, Total
	hexachlorobenzene	Beryllium, Total
2-chlorophenol	hexachlorobutadiene	Cadmium, Total
2,4-dichlorophenol	hexachlorocyclopentadiene	Chromium, Total
2,4-dimethylphenol	hexachloroethane	Chromium, Hexavalent
4,6-dinitro-o-cresol	indeno (1,2,3-cd) pyrene*	Copper, Total
2,4-dinitrophenol	isophorone	Lead, Total
2-nitrophenol	nitrobenzene	Mercury, Total
4-nitrophenol p-chloro-m-cresol	n-nitrosodimethylamine n-nitrosodi-n-propylamine	Nickel, Total Selenium, Total
Pentachlorophenol	n-nitrosodi-n-propytamme n-nitrosodiphenylamine	Silver, Total
Phenol	Phenanthrene*	Thallium, Total
2,4,6-trichlorophenol	Pyrene*	Zinc, Total
, ,	1,2,4-trichlorobenzene	Asbestos
	Naphthalene*	Cyanide, Total
	-	Phenols, Total
	* = Polynuclear Aromatic	TCDD (Dioxin)
	Hydrocarbons	

<u>Table 3</u>

<u>Pawtucket Power Associates, L.P. Sampling Requirements</u>

	Sample Location #1		Sample Location #2		Sample Location #3		Sample Location #4			
		e Port on the I e of the Oil/W				H Adjustment Sample Port			Sample Port on the Discharge Pipe of the Cooling Tower	
Month	Composite Sample	Parameters	Grab Sample*	Parameters	Grab Sample	Parameters	Grab Sample	Parameters	Composite Sample	Parameters
January	X	Cd, Cr, Cu, Pb Ni, Zn	X	O & G	X	Cd, Cr, Cu, Pb Ni, Zn	X	Cd, Cr, Cu, Pb Ni, Zn	X	Cd, Cr, Cu, Pb Ni, Zn
February										
March										
April	X	Cd, Cr, Cu, Pb Ni, Zn	X	O & G	X	Cd, Cr, Cu, Pb Ni, Zn	X	Cd, Cr, Cu, Pb Ni, Zn	X	Cd, Cr, Cu, Pb Ni, Zn
May										
June										
July	X	Cd, Cr, Cu, Pb Ni, Zn	X	O & G	X	Cd, Cr, Cu, Pb Ni, Zn	X	Cd, Cr, Cu, Pb Ni, Zn	X	Cd, Cr, Cu, Pb Ni, Zn
August										
September										
October	X	Cd, Cr, Cu, Pb Ni, Zn	X	O & G	X	Cd, Cr, Cu, Pb Ni, Zn	X	Cd, Cr, Cu, Pb Ni, Zn	X	Cd, Cr, Cu, Pb Ni, Zn
November										
December										

Legend

Cd - Cadmium Pb - Lead O & G – Total Oil and Grease (fats, oils, and grease)

 $\begin{array}{ll} \text{Cr - Chromium} & \text{Ni - Nickel} \\ \text{Cu - Copper} & \text{Ag - Silver} \\ \text{CN - Cyanide} & \text{Zn - Zinc} \end{array}$

*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:		
		RETURN TO: Narragansett Bay Commission Pretreatment Program
[,		, as authorized representative of
		, do hereby decree that the cooling
past month. I am aware engineering study must be immedia	that if the chemicals used	losages were not altered in any way during the or the additive dosages are altered, then are rate that the changes will not cause detectable ng tower blowdown.
under my direction or personnel properly gat person or persons who he information submomplete. I am awa	supervision in accordance ther and evaluate the informormanage the system, or that the best of manage the be	nt and all attachments were properly prepared with a system designed to assure that qualified mation submitted. Based on my inquiry of the nose responsible for gathering the information by knowledge and belief, true, accurate, and ant penalties for submitting false information to the forknown violations.
Authorized Representa	ative Signature	 Date

CERTIFICATE TO DISCHARGE

the following types of process water:

STEAM ELECTRIC POWER GENERATION WASTEWATER

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

181 Concord Street	
Pawtucket, RI 02860	
PERMIT NUMBER: <u>B1604</u> -	008-0422
PERMIT EXPIRATION DA	TE: <u>04/30/2022</u>
The discharge permit must be kept at	the above address for inspection. Failure to comply with the rules
and regulations of the Narragansett B	ay Commission or with the conditions of the discharge permit will
ubject the permittee to fines of up to	\$25,000 per violation per R.I.G.L. 46-25-25.3.
April 28 2017	/s/ Kerry M. Britt

Kerry M. Britt, Pretreatment Manager

Pawtucket Power Associates, L.P.

Initial Date of Issuance

TYPICAL LANDFILL LEACHATE FACILITY WASTEWATER DISHCHARGE 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.

/s/ Kerry M. Britt	November 7, 2014
Kerry M. Britt, Pretreatment Manager	Date

For the Narragansett Bay Commission:

Narragansett Bay Commission

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	Signature	Date
Rhode Island Resource Recovery Corporation	_	

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:

	Daily Maximum	Monthly	
	Limitation	Average	
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;
 - 1. 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:
 - $\frac{Sample\ Location\ \#1}{tank,\ collecting\ all\ process\ discharges\ specified\ in\ Section\ B(1)}{(a\ and\ b)\ of\ this\ permit.}$
 - $\label{eq:sample Location #2 Sample port on the discharge line of the oil/water separator located near the SBR Administration Building, collecting all process discharges specified in Section B(1)(c) of this permit.}$
 - 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 Kjeldahl Nitrogen

Total Nitrogen

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 Kjeldahl Nitrogen

Total Nitrogen

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 Kjeldahl Nitrogen

Total Nitrogen

Other Parameters:

Cvanide

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 Kjeldahl Nitrogen

Total Nitrogen

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>	Limitation (Max)
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>	Daily Maximum Limitation	Monthly Average
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 Locat	ion 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)

 $Cr-Chromium \qquad Ni-Nickel \qquad \qquad BOD-Biochemical\ Oxygen\ Demand$

Cu - CopperAg - Silver (Total)TSS - Total Suspended SolidsCN - CyanideZn - Zinc (Total)TTO - Total Toxic OrganicsPb - LeadTKN - 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	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 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

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 - 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)
	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
2013	June	275,368	0.31	0.71
2015	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
	January	264,445	0.27	0.60
2014	February	264,989	0.28	0.62
2014	March	256,477	0.3	0.64
	April	304,239	0.25	0.63
Avera	ge Monthly	239,669	0.32	0.62

Notes

- 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

	Average Daily Flow	Peak Daily Flow	
Scenario	(gpd)	(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.

Two-0.75M Gallon Each
Equalization Storage Tanks

Three SBR Tanks for
Nitrogen Removal

Dewatering from Wells

New PS-2

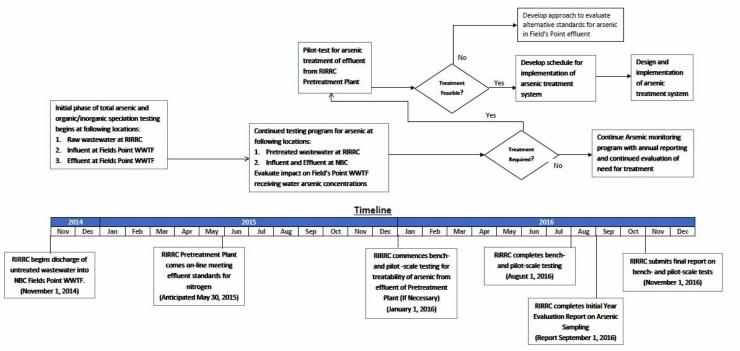
New PS-1

RIRRC Wastewater Plant
(Currently Under Construction)

Figure 1
Schematic Component Flowchart – RIRRC Wastewater and NBC System

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Figure 2
Decision Flowchart – Arsenic in RIRRC Wastewater and Impacts on NBC Fields Point WPCF Effluent



DRAFT FOR REVIEW AND COMMENT June 10, 2014 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 reports 1 , the highest arsenic concentration in the discharge in the last two years is 1.49 μ g/L, with typical levels being approximately 1.1 μ g/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:

Flow (MGD) x Concentration (mg/L) x 8.34 conversion factor = pounds arsenic per day discharged (42.7 MGD) x (.00149 mg/L) x 8.34 = 0.53 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 $3.54 \,\mu\text{g/L}$. 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	DIDEMI and detect to 2011
Dilution Factor	20	RIDEM Letter dated June 10, 2011
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 x (320,000/240,000) =0.83	3.5	Yes
Long-Term Conditions (2019 to completion of Phase VI)	390,000	0.62 x (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:

- 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;
- 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:
- 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.
- Determine acceptable arsenic loading conditions from RIRRC to keep NBC effluent in compliance by using the arsenic information gathered during the augmented monitoring program.
- 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

	Sampling at RIRRC				Sampling at NBC			
Scenario	Sample Location	Sample Type	Frequency	Reason	Sample Location	Sample Type	Frequency	Reason
Pre-RIRRC Discharge to NBC Field's Point WWTF	Influent	N/A	N/A	N/A	Influent	Total As	1x/week	Current Frequency
(July 2014 through	Effluent			Current Cranston IPP Requirements	Effluent	Total As	1x/month	Current Permit Requirement
October 2014)		Total As	1x/week			Speciation	Two samples during period	Evaluate any changes in speciation from treatment at Field's Point
Before RIRRC	Influent			Same as Effluent	Influent	Total As	1x/week	Current Frequency
Pretreatment Plant	Effluent	Total As	1x/week	Monitor As concentrations leaving RIRRC	Effluent	Total As	1x/month	Current Frequency
Operational (Nov 2014 through May 2015)						Speciation	1x/month	Evaluate any changes in speciation from treatment at Field's Point
Initial Operations of RIRRC Pretreatment	Influent	Total As	1x/week	Monitor removal efficiency of Pretreatment Plant	Influent	Total As	1x/week	Current Permit Requirement
Plant		Speciation	None	Not relevant		Speciation	Every 2 months	Assess influent arsenic types
(May 2015 through May 2016)	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
See Note 2		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					Total As	1x/week	Current Frequency
		sampling progra	m to be establis	ned by NDC in IPP	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.

DRAFT FOR REVIEW AND COMMENT for NBC Submission June 10, 2014

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 cycletimes 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 coprecipitation; 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: <u>P3412-004-1019</u>				
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 /s/ Kerry M. Britt

Initial Date of Issuance Kerry M. Britt, Pretreatment Manager

TYPICAL ZERO PROCESS WASTEWATER-SANITARY DISCHARGE PERMIT



ZERO PROCESS WASTEWATER - SANITARY DISCHARGE PERMIT

Permit Number: P4100-097-0322

Company Name: **D & D CHROME PLATING, INC.** Facility Address: 355 Dexter Street, Providence, RI 02907 Mailing Address: 355 Dexter Street, Providence, RI 02907

Facility President: Mr. David Habershaw

Facility Authorized Agent: Mr. David Habershaw

User Classification: Recycled Metal Finishing Operations

Categorical Standards Applicable: None

In accordance with R.I.G.L. §46-25-1 et. seq. and the Rules and Regulations For The Use Of Wastewater Facilities Within The Narragansett Bay Water Quality Management District, the Narragansett Bay Commission hereby grants a Zero Process Wastewater-Sanitary Discharge Permit to **Mr. David Habershaw and D & D Chrome Plating, 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 becomes effective on April 1, 2017 and expires on March 31, 2022.

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.

/s/ Kerry M. Britt Kerry M. Britt, Pretreatment Manager Narragansett Bay Commission	March 31, 2017 Date
Mr. David Habershaw and D & D Chro	me Plating, Inc. hereby consents to this Zero Process
Wastewater-Sanitary Discharge Permit. I	n so consenting, appropriate officers of D & D
Chrome Plating, Inc. have personally rea	d and understood each of the numbered provisions in
this Zero Discharge Permit. This permit a	llows D & D Chrome Plating, Inc. to continue to
discharge sanitary wastewater into the Na	ragansett Bay Commission sewer system while
operating a process wastewater recycle sy	stem on the premises.
A corporation organized under the laws of	
composed of officers as follows:	
Please Type or Print	Signature
President	Date
Vice President	Date
Secretary	Date
Treasurer	Date
I have read and understood the NBC's Rul contained in this permit.	es and Regulations and the conditions and procedures
Company Authorized Agent(s)	
Title	Seal
Signature	

For the Narragansett Bay Commission:

NOTE: The NBC will accept the person(s) named on page 2 of this permit as the company's authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the company's by-laws or per a vote of the directors if the company is a corporation; a general partner or proprietor if the company is a partnership or sole proprietorship respectively; or a duly authorized representative, the individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the company. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

CONDITIONS TO PERMIT

A. Zero Process Discharge-Wastewater Recycle Pretreatment System Requirements:

1. The permittee shall operate and maintain a Zero Process Discharge Wastewater Recycle Pretreatment System as proposed in the plans that have been received by the NBC on February 1, 2008 and April 15, 2008. This pretreatment system shall be used specifically for the use of recycling wastewater or eliminating discharges from the following operations:

Electroplating 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 February 1, 2008 and April 15, 2008 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 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.

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. Electroplating/Metal Finishing Wastewaters;
- 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. Amount of sludge generated on a monthly basis;
 - b. Completed manifest forms for hazardous materials;
 - c. Maintenance performed on the pretreatment system and other maintenance requests specified by inspectors of the NBC.
- 2. Records which substantiate any information supplied in permit applications, Self-Monitoring Compliance Reports and any other informational requirements of the Rules and Regulations or any applicable State or Federal law are to be kept by the permittee for a period of at least three (3) years unless a dispute or litigation involving the subject of those records is pending, in which case these records are to be kept by the permittee for a period of at least three (3) years following resolution of such litigation or dispute.

D. Certification of No Discharge:

The permittee shall submit written certification monthly stating that the permittee has made no process wastewater discharges to the sewer during the previous one (1) month period. This certification must be received within thirty (30) days from the end of the required reporting month. This certification must contain monthly water meter readings and must be made on the form designated as Zero Process Wastewater Discharge Certification, Attachment A.

E. Spill and Slug Control Plans:

The permittee must maintain an approved Spill and Slug Prevention Control Plan and all associated facilities to ensure that incidental and accidental spills are unable to enter the NBC sewer system.

F. Toxic Organic/Solvent Management Plan:

The permittee must ensure that toxic organic compounds are not routinely discharged or spilled into the sewer system and must at all times maintain associated spill control facilities to ensure proper containment and disposal of toxic organic compounds. A list of toxic organic compounds is enclosed.

G. Emergency/Routine Notification Requirements:

1. Emergency Notification of Accidental/Incidental Discharge

In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR 403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 222-6781. Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system or may affect the adequacy of spill control measures. Operational changes that may affect the quality or quantity of the process wastestream or the adequacy of spill control measures include, but are not limited to, the following:

- a. Addition, removal, or relocation of process tanks or solutions;
- b. Installation of new wastewater generating process operations;
- c. Relocation of process operation piping or valving resulting in a new or different point of discharge;
- d. Modification of any pretreatment process or procedure;
- e. Installation or modification of pretreatment equipment or associated piping;

Should the permittee be unsure as to whether an operational change requires written NBC notification, it is strongly recommended that the permittee contact the NBC by telephone prior to instituting the proposed change in operations. This will ensure that the proper notification is provided to the NBC. With respect to the thirty (30) day written notification requirement, should the permittee require immediate approval to make an operational change in order to accommodate business, the NBC will make every effort to accommodate the permittee so as to not impede operations at the facility. The discretion used by the NBC with respect to this issue is dependent on the magnitude of the proposed operational changes and the resulting effect on the characteristics of the wastestream and/or the spill control measures at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- f. Change from the hours of facility operation specified in the discharge permit application;
- g. Change in the personnel responsible for the proper operation of pretreatment equipment.

H. Right of Entry:

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

I. Permit Fee:

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

J. Authorization To Do Business:

The permittee is a corporation. The permittee shall ensure the corporation be registered with the Rhode Island Secretary of State Corporations Division. D & D Chrome Plating, Inc. shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event D & D Chrome Plating, 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 D & D Chrome Plating, 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 D & D Chrome Plating, 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:

- 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;
 - 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;
 - 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 FR §403.13;
 - h. To correct typographical or other errors in the permit;
 - 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.

NPD:NJD:smb

Attachments:

Designation of Authorized Agent Form RCRA Handbook List of Toxic Organic Compounds Monthly Zero Process Wastewater Discharge Certification

Table 1

NBC Effluent Discharge Limitations Field's Point District

<u>Parameter</u>	Limitation (Max)
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>)	Averag 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.

Attachment A

Zero Process Wastewater Discharge Certification

	For the Month of	, 20
Company Name:		
Address:		Pretreatment Program
I,		, as authorized representative of
	, do hereby decree that no pro	ocess wastewater was discharged into
the Narragansett Bay	Commission sewer system for	the past month.
Date of Meter Readi	ngs:	
Meter Number	Water Meter Readings	Units (cf, gal.)
Meter #1	·	<u> </u>
Meter #2		
Meter #3		
my direction or super properly gather and persons who manage submitted is, to the l	ervision in accordance with a sy evaluate the information sub- et the system, or those responsible best of my knowledge and believes penalties for submitting false	nd all attachments were properly prepared under system designed to assure that qualified personnel mitted. Based on my inquiry of the person or ole for gathering the information, the information ef, true, accurate, and complete. I am aware that information including the possibility of fine and
Authorized Represer	ntative Signature	Date

TYPICAL SEPTAGE HAULER WASTEATER DISCHARGE PERMIT



NARRAGANSETT BAY COMMISSION SEPTAGE DISCHARGE PERMIT

Permit Number: B8000-138-0122

Company Name: **BLUE LINE SEPTIC, LLC** Company President: Mr. Charles A. Lang

Facility Address: 23 Bishop Hill Road, Johnston, RI 02919 Mailing Address: P. O. Box 889, North Scituate, RI 02857

DEM License Number: 922

Narragansett Bay Commission

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. Charles A.** Lang and Blue Line Septic, LLC, hereinafter jointly referred to as Permittee, to discharge residential quality septage to the NBC Lincoln Septage Receiving Station. The Permittee must adhere to the terms, conditions, and procedures of this permit, the Rules and Regulations of the NBC, and all other applicable federal, state, and local regulations. Any changes to the information initially provided to the NBC by the Permittee in the permit application must immediately be reported to the NBC. This permit is not transferable without the written consent of the NBC. If the Permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a permit renewal in accordance with the requirements of Article 8 of the NBC's Rules and Regulations a minimum of ninety (90) days prior to the expiration date.

The permittee is authorized to discharge residential quality septage to the NBC Lincoln Septage Receiving Station from the vehicles listed in Attachment A of this permit. This permit consists of two pages with Conditions 1 through 15 and Septage Permit Attachment A.

The permittee shall at all times follow the procedures specified in Attachment A of this permit for adding new septage vehicles and for discharging at the NBC Lincoln Septage Receiving Station.

This permit becomes effective on February 1, 2017 and expires on January 31, 2022.

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	January 20, 2017	
Kerry M. Britt, Pretreatment Manager	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 B8000-138-0122 Attachment A

Blue Line Septic, LLC

PERMITTED VEHICLES:

VEHICLE TYPE	REGISTRATION NUMBER	TRUCK VIN NUMBER	CAPACITY (GALLONS)
TANKER - FREIGHTLINER	RI-13122	1FVXJLBB2VL847009	2,470

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: P8500-390-1121

Company Name: HUDSON STREET DELI, LLC

Facility Address: 93 Sycamore Street, Providence, RI 02909 Mailing Address: 68 Hudson Street, Providence, RI 02909

Facility President: Mr. Bryan Rinebolt

Facility Authorized Agent: Mr. Bryan Rinebolt User Classification: Restaurant/Food Preparation

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. Bryan Rinebolt and Hudson Street Deli, LLC**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 12 pages and conditions A - T.

This permit becomes effective upon receipt and expires on November 30, 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 January 13, 2017

Kerry M. Britt, Pretreatment Manager Date

Kerry M. Britt, Pretreatment Manager Narragansett Bay Commission

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).

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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 12, attached hereto and incorporated herein. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the Rules and Regulations, as well as 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 Commission'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 tanks, solutions, or process wastewater streams to the NBC's facilities:
 - a. Dish, Pot, and Equipment Washwater;
 - b. Food Preparation Wastewater.
- 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 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 solutions or chemicals which may cause a violation of the NBC's Rules and Regulations.
- 4. The use of garbage grinders, food macerators or other equipment for the purpose of discharging solid waste to the sewer system is strictly prohibited.

D. Pretreatment Requirements:

- 1. Installation of a grease removal unit that conforms with the grease removal unit specifications detailed in Article 4.15 of the NBC Rules and Regulations is not required by this permit. This does not relieve the permittee from the responsibility to strictly adhere to all pertinent Building Officials & Code Administrators International, Inc. (BOCA), State of Rhode Island and local building codes with regard to the installation of a grease removal system. The NBC may, at any time, change the pretreatment requirements specified in this permit should the menu, facility operations or NBC Rules and Regulations change.
- 2. The permittee shall install a grease removal system that conforms to 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 a 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. Discovery of additional information unavailable to the NBC at the time this permit was prepared;
- d. Failure to meet NBC effluent limitations.

F. Record Keeping Requirements:

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/accidental spills are not able to enter the NBC sewer system. In the case of an accidental discharge into the NBC facilities, including any discharge that would violate a Federal prohibition under 40 CFR 403.5(b), it is the responsibility of the permittee to notify the NBC of the incident immediately by calling the Pretreatment Section at 461-8848 or during non-business hours at its twenty-four (24) hour Emergency Hotline Number, 222-6781. Within five (5) days following an accidental discharge, the permittee shall submit to the NBC a detailed written report describing the cause and volume of the discharge and the measures to be taken by the user to prevent similar future occurrences by the permittee.

2. Routine Notification of Operational Changes

The permittee must notify the NBC in writing at least thirty (30) days prior to instituting any changes in operations that may affect the quality or quantity of the process wastestream discharged to the sewer system. Operational changes that may affect the quality or quantity of the process wastestream include, but are not limited to, the following:

- a. Change in restaurant menu;
- b. Restaurant expansion;
- c. 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 at the facility. The permittee may notify the NBC of the following operational changes by telephone rather than in writing as required above:

- d. Changes in food preparation methods;
- e. Change from hours of facility operation specified in the discharge permit application.
- 3. 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. In this case, 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 sole proprietorship. The permittee shall ensure the sole proprietorship be registered with the Rhode Island Secretary of State Corporations Division. Hudson Street Deli, LLC shall remain in good standing with the Rhode Island Secretary of State Corporations Division at all times. In the event Hudson Street Deli, LLC has its charter or existence revoked by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of notice of such revocation.

In the event Hudson Street Deli, LLC is no longer in good standing with the Rhode Island Secretary of State or the charter is revoked for any reason, any individual named as a copermittee or any individual exercising ownership of Hudson Street Deli, LLC 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:

- 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:
 - 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;
 - 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;

- 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;
- 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.

BES:AB:smb

Attachments:

Designation of Authorized Agent RCRA Handbook

Table 1

NBC Effluent Discharge Limitations Field's Point District

<u>Parameter</u>	Limitation (Max)
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.

CERTIFICATE TO DISCHARGE

the following types of process water:

DISH, POT, AND EQUIPMENT WASHWATER AND FOOD PREPARATION WASTEWATER

into the facilities of the

Narragansett Bay Commission

is hereby granted to:

Hudson S	treet Deli, LLC
93 Sycam	nore Street
Providence	ce, RI 02909
PERMIT I	NUMBER: <u>P8500-390-1121</u>
PERMIT I	EXPIRATION DATE: <u>11/30/2021</u>

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.

January 13, 2017

Initial Date of Issuance

/s/ Kerry M. Britt

Kerry M. Britt, Pretreatment Manager

TYPICAL DENTAL FACILITY WASTEWATER DISCHARGE PERMIT



WASTEWATER DISCHARGE PERMIT

Permit Number: P9400-389-0922

Company Name: RICCI FAMILY DENTISTRY

Facility Address: 1252 Smith Street, Providence, RI 02908 Mailing Address: 1252 Smith Street, Providence, RI 02908

Facility Owner: Dr. John Ricci

Facility Authorized Agents: Dr. John Ricci, Dr. Eric Ricci

User Classification: Dental Operations

Categorical Standards Applicable: 40 CFR §441.40, 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), **Dr. John Ricci and Ricci Family Dentistry**, hereinafter jointly referred to as **Permittee**, is hereby authorized to discharge process wastewater from the above identified facility in accordance with the terms and conditions set forth in this permit.

All discharges authorized herein must be consistent with the effluent limitations, monitoring requirements and other conditions set forth in this permit. The discharge of any pollutant not identified in this permit or any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. This permit consists of 15 pages with conditions A - U and Attachment A.

This permit is effective upon receipt and expires on September 30, 2022.

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 December 1, 2017

Kerry M. Britt. Pretreatment Manager Date

Kerry M. Britt, Pretreatment Manager Narragansett Bay Commission

NOTE: The NBC will accept the person(s) named on this permit as the **Permittee's** authorized agent(s) until notified otherwise.

An authorized agent or authorized company representative is a person who is a principal executive officer or other corporate officer with signatory powers as per the **Permittee's** by-laws or per a vote of the directors if the **Permittee** is a corporation; a general partner or proprietor if the **Permittee** is a partnership or sole proprietorship respectively; or a duly authorized representative of an individual designated above if such representative is responsible for the overall operation of the facility and has the authority to sign contracts, permits, permit applications, monitoring results and other documents in the company's name and otherwise bind the **Permittee**. The **Permittee** may designate additional or new authorized agents by completing and submitting the enclosed Designation of Authorized Agent form.

The NBC will not accept documents signed by persons other than the Company's authorized agent(s) or authorized representative(s).

CONDITIONS TO PERMIT

A. Effluent Discharge Limitations:

- 1. The permittee shall at all times comply with the effluent limitations specified in Table 1 on page 14, attached hereto and incorporated herein.
- 2. The permittee shall comply with all discharge limitations and prohibitions contained in Article 5 of the NBC's Rules and Regulations, as well as all other provisions of those Rules, and any other applicable State or Federal standards, including but not limited to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq. and R.I.G.L. §46-12-1 et seq. The permittee shall at all times comply with 40 CFR §403.5 and may not introduce into the NBC's facilities any pollutants which shall violate the general or specific prohibitions including but not limited to discharges resulting in pass through or interference situations at the NBC's facilities.
- 3. The permittee shall not increase the use of process water or dilute a discharge in any way as a partial or complete substitute for adequate treatment to achieve compliance with the above standards.
- 4. The permittee is classified as a dentist and therefore, must at all times comply with 40 CFR § 441.40, Pretreatment Standards for New Sources as well as the NBC Best Management Practices for the Management of Waste Dental Amalgam.

B. Permitted Discharges:

- 1. The permittee is authorized to discharge the following tanks, solutions or process wastewater streams to the NBC's facilities:
 - a. Treated Dental Wastewater Containing Amalgam;
 - b. Dental Process Wastewaters.
- 2. No other process wastewater is to be discharged to the sewer unless specifically approved by the NBC in writing.

C. Prohibitions:

- 1. The permittee is strictly prohibited from discharging any prohibited substances as detailed in the Rules and Regulations of the Narragansett Bay Commission. Prohibited discharges include, but are not limited to, the following:
 - a. X-Ray Processing Rinsewater, Developer, and Fixer Solutions;
 - b. Dental Amalgam;
 - c. Elemental Mercury;
 - d. Untreated Dental Wastewater Containing Amalgam;
 - e. Acidic Solutions with a pH less than 5.0 standard units;
 - f. Caustic Solutions with a pH greater than 11.0 standard units;
 - g. Solvents;
 - h. Sludges.
- 2. The permittee is strictly prohibited from discharging any process wastewater streams other than those specified in Section B(1) of this permit or wastestreams containing pollutants with concentrations in excess of the effluent limitations specified in Table 1 on page 14, attached hereto and incorporated herein.
- 3. Non-sanitary discharges other than those specified in Section B of this permit are prohibited unless specifically approved by the NBC in writing.
- 4. No chemicals, oils, solutions and/or materials including solid substances such as towels, casts, etc. in quantities or of such size capable of causing obstruction to the flow in sewers may be discharged to the sewer unless specifically approved by the NBC in writing.
- 5. Discharging of chemicals or solutions containing materials listed in the attached List of Toxic Pollutants (Table 2) is strictly prohibited if said discharge would result in violation of NBC limitations in Table 1.

D. Pretreatment Requirements:

1. The permittee must provide and maintain an easily accessible sample location downstream of each process discharge specified in Section B(1) of this permit. A total of one (1) sample location must be provided and must collect wastewater from the process operations indicated as follows:

Sample Location #1 - Sample port on the discharge line of the amalgam separator, collecting all process discharges specified in Section B(1)(a and b) of this permit.

The permittee is prohibited from discharging dilution wastestreams, such as sanitary and non-contact cooling water into any process wastewater sampling location. Dilution wastestreams must discharge downstream of the process wastewater sampling location.

The discharge through Sample Location #1 must be in compliance with the effluent limitations specified in Section A and Table 1 of this permit.

- 2. The permittee is responsible for properly operating and maintaining the pretreatment system to achieve and ensure compliance with the conditions of this permit. Proper operation and maintenance shall include but not be limited to: effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures.
- 3. In accordance with the NBC's Best Management Practice for the Management of Waste Dental Amalgam, the permittee shall install, operate and maintain an amalgam separator which is ISO 11143 certified to an efficiency of 99% removal in accordance with the plans submitted to the NBC on September 28, 2017. The amalgam separator shall be fully operational whenever discharges from dental procedures are occurring.
- 4. 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.
- 5. The permittee shall install chair side traps on all dental chairs to capture large amalgam particles from cuspidors and vacuum systems. Chair side traps must be inspected daily and cleaned or replaced as necessary. Disposable traps or material from reusable traps must be placed in a labeled storage container. The permittee may only rinse a trap if necessary and only in a designated sink that is plumbed with appropriate flow restriction to an NBC approved amalgam separator.
- 6. 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.
- 7. 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.

- 8. The permittee has designated three sinks for equipment washing. These sinks must be plumbed to the amalgam separator through a sample location. Signs stating "Equipment Washing Only" must be posted at these sinks. Flow restrictors must be installed on the discharge pipes of these sinks to prevent overwhelming the amalgam separator.
- 9. The permittee has designated one sink for sanitary use only. The permittee shall post signs at this sink stating "Sanitary Use Only". Washing of equipment, instruments, filters, and capsules in this sink 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 onsite the manufacturer's manual for the amalgam separator. In addition, a logbook must be maintained 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's Pretreatment Section at 461-8848. Pretreatment equipment failure includes, but is not limited to, the following:

Amalgam Separator Failure

Any equipment failure or malfunction which results in a spill and/or accidental discharge must be reported immediately in accordance with the NBC Emergency Spill Notification Procedure. Should a pretreatment equipment failure or malfunction occur, the permittee is strictly responsible for complying with all other permit conditions, including, but not limited to, maintaining full compliance with effluent limitations and monitoring requirements.

I. Right of Entry:

The NBC, upon presenting identification and appropriate credentials, is authorized to enter the premises of the permittee during working hours and at other reasonable times for the purposes of inspection, sampling, reading water meters, records inspecting and copying and as otherwise authorized under R.I.G.L. §46-25-25.1. Reasonable hours in the context of inspection and sampling include any time the NBC has reason to believe that violation of the permit or of the Rules and Regulations is occurring.

J. Permit Fee:

The permittee agrees to pay an annual permit fee and all sewer user fees assessed by the NBC in accordance with rates and fees approved by the Public Utilities Commission pursuant to R.I.G.L. §39-1-1 et seq. and §46-25-1 et seq. The permittee agrees to reimburse the NBC for the cost of the collection of any and all fees associated with the permit, including reasonable attorney's fees.

K. Authorization To Do Business:

The permittee is an individual doing business as Ricci Family Dentistry. As such the permittee shall be personally responsible for compliance with the terms and conditions in this permit. In the event the permittee subsequently incorporates or changes ownership to an entity created by the Rhode Island Secretary of State, the permittee shall notify the NBC in writing within thirty (30) days of the change.

L. Closing, Selling, Moving the Business:

If the permittee intends to close, liquidate, sell or move the permitted premises, located as referenced on page 1 of this permit, the permittee must notify the NBC in writing at least thirty (30) days prior to disposing of any process waste associated with the move or the cessation of business.

M. Transfer of Permit Prohibited:

Wastewater discharge permits are issued to a specific user for a specific operation. This permit may not be reassigned, transferred or sold to a new owner, new user, different premises, or a new or changed operation without the express written permission from the NBC. The permittee shall provide a copy of this permit to any prospective purchaser of said facility referenced on page 1 of this permit at least fourteen (14) days prior to closing on the business or property.

N. Permit Violations:

1. Enforcement Costs

The permittee agrees to reimburse the NBC for the cost of enforcing the permit, including reasonable attorneys' fees, if violations of the permit are found by a hearing officer during the course of an administrative hearing or if such decision is appealed, then in a court of competent jurisdiction.

2. Damage to the Facilities

The permittee agrees to indemnify and hold harmless the NBC from and against any liability, loss, cost, expense or actual damage (including reasonable attorneys' and accountants' fees incurred in defending or prosecuting any claim for any such liability, loss, cost, expense or damage) suffered by the NBC and caused by discharges from the permittee, either singly or by interaction with other wastes.

3. Violations of the NBC's Permit

The permittee agrees to reimburse the NBC for any penalty and additional operating expense incurred by the NBC for violations of the NBC's NPDES, RIPDES, or any other state or federal permit which were caused by discharges from the permittee, either singly or by interaction with other wastes.

4. Penalties for Violations

Article 10 of the NBC's Rules and Regulations provides that any person who violates a permit condition is subject to an administrative or civil penalty of up to \$25,000 per violation per day as defined in R.I.G.L. §46-25-25.2. Willful or criminally negligent violations shall be punishable by the aforementioned fine and/or imprisonment as defined in R.I.G.L. §46-25-25.3.

O. Revocation/Suspension of Permit:

- 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:
 - Failure to accurately report the wastewater constituents and characteristics of the discharge;
 - b. Failure to report changes in operations or wastewater constituents;
 - c. Failure to allow NBC personnel statutorily authorized access for the purposes of inspection or monitoring;
 - d. Failure to adhere to an approved compliance schedule;
 - e. Failure to comply with administrative orders or settlement agreements;
 - f. Failure to pay authorized fees and user charges;
 - g. Violation of any other applicable permit conditions.

This list is for illustrative purposes and is not intended to be inclusive.

2. The Executive Director may suspend this wastewater discharge permit should the permittee cease operations for any period exceeding one (1) month. The suspension will not act as a revocation of the permit, but rather as a temporary suspension of the user's rights under the permit while operations have ceased. During such suspension, the user's connection to the facilities shall be plugged. The user shall still be required to pay the permit fee, since the permit itself will not be revoked. During such suspension, the user shall be disconnected from the facility. The Commission shall have the authority to make periodic inspections during this time to determine whether the user is continuing to discharge regulated wastewater. Such discharge may be considered grounds for revocation of the wastewater discharge permit.

P. Civil and Criminal Liability:

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with the NBC's Rules and Regulations or State or Federal laws or regulations.

Q. Duty To Comply:

- 1. The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for enforcement proceedings including administrative, civil and/or criminal penalties, injunctive relief and summary abatements.
- 2. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

R. Removed Substances:

Solids, sludges, filter residue or other pollutants removed in the course of treatment or control of waters or wastewaters shall be disposed of in accordance with §405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. A Resource Conservation and Recovery Act (RCRA) informational brochure is attached to this permit to inform you of your RCRA obligations.

S. Permit Modification/Renewal:

- 1. This permit may be modified for various reasons, including but not limited to the following:
 - a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;
 - 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;
- 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;
- 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.

ND:NJD:rg

Attachments:

Designation of Authorized Agent Form RCRA Handbook

Table 1

NBC Effluent Discharge Limitations Field's Point District

<u>Parameter</u>	Limitation (Max)
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.

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^{*} 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 benzene	acenaphthylene * anthracene *	alpha-BHC beta-BHC
bromoform	benzidine	
		gamma-BHC delta-BHC
carbon tetrachloride chlorobenzene	benzo (a) anthracene *	chlordane
chlorodibromomethane	benso (a) pyrene * 3,4-benzofluoranthene *	4,4'-DDT
chloroethane	benzo (ghi) perylene *	4,4'-DDE
2-chloroethylvinyl ether	benzo (k) fluoranthene	4,4'-DDE 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-1242 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-1240
1,2-trans-dichloroethylene	diethyl phthalate	PCB-1016
1,1,1-trichloroethane	dimethyl phthalate	toxaphene
1,1,2-trichloroethane	di-n-butyl phthalate	toxaphene
trichloroethylene	2,4-dinitrotoleune	OTHER TOXIC
vinyl chloride	2,6-dinitrotoleune	POLLUTANTS AND
vinyi emoriae	di-n-octyl phthalate	TOTAL PHENOL
ACID COMPOUNDS -	1,2-diphenylhydrazine	TOTALTALINOL
EPA METHOD 625	(as asobenzene)	Antimony, Total
LIM WEITIGE VE	fluoranthene *	Arsenic, Total
2-chlorophenol	fluorene *	Beryllium, Total
2,4-dichlorophenol	hexachlorobenzene	Cadmium, Total
2,4-dimethylphenol	hexachlorobutadiene	Chromium, Total
4,6-dinitro-o-cresol	hexachlorocyclopentadiene	Chromium, Hexavalent
2,4-dinitrophenol	hexachloroethane	Copper, Total
2-nitrophenol	indeno (1,2,3-cd) pyrene *	Lead, Total
4-nitrophenol	isophorone	Mercury, Total
p-chloro-m-cresol	naphthalene *	Nickel, Total
pentachlorophenol	nitrobenzene	Selenium, Total
phenol	N-nitrodimethylamine	Silver, Total
2,4,6-trichlorophenol	N-nitrosodi-n-propylamine	Thallium, Total
-, .,	N-nitrosodiphenylamine	Zinc, Total
	phenanthrene *	Asbestos
	pyrene *	Cyanide, Total
	1,2,4-trichlorobenzene	Phenols, Total
	* = Polynuclear Aromatic	TCDD (Dioxin)
	Hydrocarbons	` '

Attachment A

Best Management Practice Certification

For the 12-month period from	, 20 to	, 20
		RETURN TO: Narragansett Bay Commission Pretreatment Program 2 Ernest Street Providence, RI 02905-5502
I,	, as authorized	representative of
	, do hereby decr	ee that the Narragansett Bay
Commission Best Management Prac	tices for the Management of V	Waste Dental Amalgam have
been fully complied with for the pas	t twelve month period.	
I certify under penalty of law that this my direction or supervision in accordary properly gather and evaluate the inference of the persons who manage the system, or the submitted is, to the best of my knowled there are significant penalties for submitted in the penalties for submitted is a significant penalties.	ance with a system designed to commutation submitted. Based coose responsible for gathering edge and belief, true, accurate	to assure that qualified personnel on my inquiry of the person or the information, the information e, and complete. I am aware that
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:

Ricci Fan	nily Dentistry
1252 Smi	th Street
Providenc	ce, RI 02908
PERMIT N	NUMBER: <u>P9400-389-0922</u>
PERMIT I	EXPIRATION DATE: <u>09/30/2022</u>

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.

<u>December 1, 2017</u>
<u>Initial Date of Issuance</u>

/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 <u>infrequent</u> nature such as batch discharges, which may occur only once per year:

Source of Discharge	Method of Discharge
Example: Annual Power Washing of	Gravity flow to pretreatment system
Plating Room Floors	

3.	List each room or area inside or outside of your facility in which chemicals, solvents, liquids, fuel or lubricating oils, hazardous waste, etc. may be used or stored and indicate if spill control facilities are in place to prevent a spill from reaching the sewer system.

Room/Area	Spill Control Facilities in Place Yes/No

Attachment A must be completed for each area listed above with the exception of boiler facilities.

4. Attach a sketch of your entire facility showing each area/room listed above. This sketch must show the location of all floor drains, open sewer connections, berms, etc. in relation to the rooms listed above. Be sure to include outside yard drains located near loading docks or storage areas. For multilevel facilities a sketch must be provided for each level of the facility.

Section B: Spill Control Training, Equipment and Routine Inspections

1.	The NBC recommends all employees working in areas specified in Section A(3) be thoroughly trained annually in spill control procedures for their
	respective work areas. List all spill control training that has been conducted a your facility and indicate the frequency of training:

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.
<u>Se</u>	ection 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 tha 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 spil during a filling procedure?YesNo
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?No If yes describe chemicals:
8.	Detail spill containment provided for chemicals stored in this area.

	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?YesNo
11.	Does the boiler utilize a hot water or steam operated oil preheater?YesNo
	If so, does the condensate from the preheater discharge to the sewer?YesNo
	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.
- 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

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 conr	nections in this area?
List spill control measures in place:	
List capacity of spill containment area(s). containment area must be a minimum of container.	
Detail how a spill would contained during	working hours
Detail how a spill would be contained dur	ing non-working hours.
How will spills from this area be cleaned	up and disposed?
If currently there are no spill containment measures to provide spill containment for the timeframe necessary to implement the	r chemicals and solutions in this area and
	-

^{*} 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

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.

			Total					
Solvent	Gallons Typically Stored On Site	Discharged In Wastewater	Evaporated During Usage	Reclaimed On-site	Shipped Off-site	Consumed or Retained In Product	Other (Indicate Gallons & Disposal Method)	Gallons Stored, Used, or Disposed Annually

<u>Section C – Wastewater Analysis:</u>

Has your process	wastewater	ever	been	analyzed	tor	any	or	all	ot	the	toxic
organic compound	s or solvents	liste	d in Se	ection A?							
Ye	es		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.

<u>Section D – Solvent Process Operations:</u>

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.

<u>Section E – Spill Control Procedures:</u>

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, concluding the possibility of fine

and imprisonment for knowing violations. I hereby certify that based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for Total Toxic Organics (TTO), to the best of my knowledge and belief, no dumping of concentrated toxic organic compounds into the wastewaters has or does occur. I further certify that this facility is implementing and will abide by this Toxic Organic/Solvent Management Plan as submitted to the NBC.

SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE	TITLE	
DATE		

List of Toxic Pollutants

The following List of Toxic Pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act.

Volatiles EPA Method 624	Base/Neutral EPA Method 625	Pesticides EPA Method 625
arolein	* 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	butylbenzul 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	1
trichloroethylene	2,4-dinitrotoluene	Other Toxic Pollutants and
vinyl chloride	2,6-dinitrotoluene	Total Phenol
	di-n-octyl phthalate	Antimony, Total
	1,2-diphenylhydrazine	Arsenic, Total
	(as azobenzene)	Beryllium, Total
Acid Compounds	* fluorene	Cadmium, Total
EPA Method 625	* fluorene hexachlorobenzene	Chromium, Total Chromium, Hexavalent
2-chlorophenol	hexachlorobutadiene	Copper, Total
2,4-dichlorophenol	hexachlorocyclopentadiene	Lead, Total
2,4-dimethylphenol	hexachloroethane	Mercury, Total
4,6-dinitro-o-cresol	* indeno (1,2,3-cd) pyrene	Nickel, Total
2,4-dinitrophenol	isophorone	Selenium, Total
2-nitrophenol	* naphthalene	Silver, Total
4-nitrophenol	* nitrobenzene	Thallium, Total
p-chloro-m-cresol	N-nitrosodimethylamine	Zinc, Total
pentachlorophenol	N-nitrosodi-n-propylamine	Asbestos
phenol	N-nitrosodiphenylamine	Cyanide, Total
2,4,6-trichlorophenol	* phenanthrene	Phenols, Total

^{*=} Polynuclear Aromatic Hydrocarbons

1,2,4-trichlorobenzene

TCDD (Dioxin)

* pyrene

NBC SIGNIFICANT INDUSTRIAL USER ANNUAL INSPECTION CHECKLIST

NARRAGANSETT BAY COMMISSION



Annual Inspection Checklist For Significant Industrial Sewer Users

Company Name:		Eng/Tech:	Eng/Tech:		
Contac	rt Person(s):	Date:	Date:		
Other 1	Person(s) in Attendance:				
Company Classification: Electroplater					
	Other (specify):				
<u>Part I</u>	- Outstanding Requirements/Prog	ress Since Last Inspe	<u>ction</u>		
(a)	What progress was required of the firm si	ince the last annual inspe	ection?		
<i>(</i> 1)					
(b)	Has required work been completed? If no, when will it be completed?	Yes		N/A	
(c)	What work has facility initiated on its or	wn to improve wastewat	er disch	narge?	
(d)	Has facility expanded/scaled down ope If yes, describe.	erations? Yes	No		
(e)	Have all monitoring reports been submitted in the submitt		No		

	If no, list problem parameter(s) and discuss with user.
;)	Are samples being taken at the frequency required in the permit (i.e., mont bimonthly), analyzed for all parameters required, and all resampling result submitted? Yes No N
	If no, explain.
II	- Pretreatment Equipment and Process Operations
)	List all water using process operations and describe each process operation
`	
)	Is there a pretreatment system in operation? Yes No Describe, in full, the pretreatment technology presently being provided for treated wastestream.
)	Describe, in full, the pretreatment technology presently being provided for
)	Describe, in full, the pretreatment technology presently being provided for

(e)	Is there an operation and maintenance manual maintained pretreatment system?	d on sit Yes	te for No	N/A
(f)	Are there any spare parts maintained on site for the pretro			oment? N/A
	If yes, list spare parts.			11/11
(g)	Has system been installed according the NBC specificatio If no, what needs to be corrected?	Yes	No	N/A
*	Check pretreatment system piping, decant ports, transfer probe location, etc.	pumps	s, pH re	ecording
(h)	Has system been installed according to NBC approved pl If no, what needs to be corrected?	Yes		N/A
*	Compare plans with existing system.			
(i)	Have changes been made to process operations or pretreat NBC notification and approval?	tment Yes		without
	If yes, detail changes.			
(j)	Are any hydroxide sludges or other sludges produced at pretreatment operations?	this fac Yes	ility fro	om
	If so, indicate type of sludge, volume, and source (e.g. Hy clarifier, etc.)		_	ge from

(k)	Is any type of sludge discarded in the trash? If yes, specify.	Yes	No	
(1)	Are any concentrates or other hazardous materials remove waste contractors (e.g. spent solvents, etc.)?	ed by l Yes	nazardo No	ous
	If yes, list types and amounts.			
(m)	Does the facility utilize ion-exchange resins? If yes, are ion-exchange columns regenerated on site? If yes, how often are columns regenerated?	Yes Yes	No No	
	How is regenerate material disposed of?			
	How are columns regenerated?			
	Has the Pretreatment staff obvserved and sampled during procedure?	g the re Yes	genera No	tion
	If no, be sure to observe and arrange sampling of the rege	nerant.		
<u>rt II</u>	I - 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 If no, detail inaccuracies.	_			N/A
	(iii)	Are the pH charts being dated pr	operly (month, da	ay, and yes	,	N/A
(b)	Prov	vide the following pre-inspection p	oH calibration dat	a:		
	NBC	C pH Pen #	Date of Calibration			
(c)		facility pH probes in calibration a readings: NBCs.u.		spection Yes	nm/do ? No	. 55,
,		screpancy is greater than 0.5 s.u., a pration, deficiency should be noted		ent is ver	ified to	be in
(d)	Hov	v often are pH and/or ORP probes	s cleaned and calil	brated? _		
(e)		screpancy was observed, check institutions and complete the following:	_	he compa	any's b	uffer
Г		(1. (/	<u>#1</u>	<u>#2</u>		<u>#3</u>
-	•	of buffer				
-		using NBC instrument egistered by facility instrument				
-	_	ration date of buffer				
]	perfoi follow a) b)	crepancy was observed, a post inspressed at Pretreatment lab on the saving must be completed: NBC Instrument pH in buffer 4.0 NBC Instrument pH in buffer 7.0 NBC Instrument pH in buffer 10.	me day as the ins	pection a	nd the — —	
(f)	Is th	e facility required to maintain a lo	ogbook?	Yes	No	
	If ye	es, is the logbook being maintained	1?	Yes	No	
	Doe	s 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	is? 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)	Hav	e Hazardous Waste Manifest forms been properly ma	aintaine Yes	ed on s No	ite? N/A
Part IV	V - S	pill, Slug and Solvent Discharge Control			
(a)		Spill & Slug Prevention Control Plan (SSPCP) necessaity inspection?	ıry base Yes	ed upor No	n the
(b)	Has	a SSPCP been submitted?	Yes	No	N/A
(c)	Has	a SSPCP been approved?	Yes	No	N/A
(d)	Deta	ail how a spill in the process and pretreatment areas w	vould b	e conta	ained.
(e)	to ch	nil how a spill in the chemical storage area(s) would b neck both inside and outside storage areas, outside so			•
(f)		spill control measures physically in place as stated in	Yes	? No	N/A

(g)	Is spill control in the boiler room satisfactory? If no, what will be required to ensure proper contain	Yes ment in the l	No boiler 1	N/A room.
(h)	Based upon the facility inspection and observations is the existing SSPCP accurate and sufficient? If no, why?	Yes	, f, and No	g above N/A
(i)	Is submission of a Toxic Organic/Solvent Management necessary?	ent Plan (TO Yes	/SMP) No)
(j)	Has TO/SMP been submitted?	Yes	No	N/A
(k)	Has TO/SMP been approved?	Yes	No	N/A
(1)	Is there proper containment of solvents as stated in t	he TO/SMP Yes	? No	N/A
(m)	Is the existing TO/SMP accurate and sufficient?	Yes	No	N/A
Part V (a)	- Process Flow Measurement How many flow meters are used to measure process	wastewater	discha	arges?
(b)	Complete the following table for each process			
	<u>Location</u> <u>Process Operation Monitored</u> <u>R</u>	<u>eadings</u>	Units	<u>3</u>
				- - -
(c)	Are these flow meter readings an accurate measuren	nent of proce Yes	ess flov No	vs? N/A
(d)	If not, list user's estimate of the percent of total flow %	used for pro	cess w	ater.

(e)	average daily process flow isGPD.	to		, tne
(f)	Based upon daily flow calculation, is user properly classibilling purposes?	sified for Yes		t fee N/A
Part V	<u>'I - Sampling Procedures</u>			
(a)	Where should representative samples be taken for NBC a	and self-m	nonitor	ring?
(b)	Are samples taken here presently? If no, why not?	Yes	No	
(c)	Are non-contact cooling water or other dilution streams the sampling location?	s discharg Yes	ged ups	stream of
	* Check degreaser cooling water and steam condensate d	lischarge	lines.	
(d)	Must the combined wastestream formula be used to de EPA categorical pretreatment standards? (e.g. Does wasthrough more than one (1) location?)		-	
(e)	Does the firm conduct its own sample collection? If not, specify:	Yes	No	
(f)	Is method of sample collection acceptable? If no, why not?	Yes	No	
(g)	If firm is a metalfinisher, does cyanide sampling satisfy	EPA requ		ents? 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 la	borator	y for a	nalysis?
<u>PART</u>	VII	- LABORATORY ANALYSIS			
(a)	Is a	commercial laboratory used?	Yes	No	
	If so	, which lab?			
(b)	Is co	ommercial 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 main	ntained 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 parameters.	ication a	and ap	proved
<u>Part V</u>	<u> III -</u>	<u>User Education</u>			
(a)	Edu	cate users about each of the following:			
	NBO Purj Mor	nificant Non-Compliance (SNC) Criteria: C Mission Statement: pose and Types of NBC Inspections: nitoring and Reporting Requirements/Procedures: nments:	Yes Yes Yes Yes	No No No No	

Engineers Cor	nments:			
S				
What will be r	equired of firm?			
				·
<u>-</u>	·	 	-	

NBC INDUSTRIAL USER INSPECTION CHECKLIST

NARRAGANSETT BAY COMMISSION

Inspection Checklist For Industrial Users

	oany Name:		
	n(s) Met With:		
Comp	oany Classification:		
<u>Part I</u>	I – Requirements/Progress Since Last Insp	<u>pection</u>	
(a)) What was required of the firm since last ins	spection?	
(b)	Has required work been completed? If no, when will it be completed?		YesNo
<u>Part I</u>	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 notificati If yes, detail changes		
<u>Part I</u>	III – Maintenance and Record Keeping		
) Is pH recording required?) Are facility pH probes in calibration at the	time of the inspection?	_Yes _No _N/A
	pH readings: NBCs.u.	Companys.u	
*	* If discrepancy is greater than 0.5 s.u., and 1 calibration, deficiency should be noted.	NBC instrument is verifi	ied to be in
(c)) How often are pH probes cleaned and calib	orated?	
(d)	Is the facility required to maintain a logboot If yes, is the logbook being maintained? If no, please specify		YesNo YesNoN/A

Part IV – Spill, Slug, and Solvent Discharge Control

(a) Does the facility have a Spill & Slug Prevention Control Plan (SSI	PCP)?
	YesNoN/A
(b) Has a SSPCP been approved?	YesNoN/A
(c) Are spill control measures physically in place as stated in SSPCP?	1
	YesNoN/.
If no, Explain	
* Check for open drains or other direct sewer access points.	
	(FO (G) (D) 0
(d) Does the facility have a Toxic Organic/Solvent Management Plan	
() II TO/OMD1 1 1 1 1 10	YesNoN/A
(e) Has TO/SMP been submitted?	YesNoN/A
(f) Has TO/SMP been approved?	YesNo N/
(g) Is the existing TO/SMP accurate and sufficient?	YesNo N/
If no, Explain	
Part V - Process Flow Measurement:	
Tart v - 1 Tocess Flow Measurement.	
(a) How many flow meters are used to measure process wastewater di	ischarges?
(a) frow many frow meters are used to measure process wastewater th	ischarges:
(b) Complete the following table for each process	
(b) complete the following those for each process	
Location Process Operation Monitored Reading	ngs Units
	6
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	
detailing the proper disposal methods that should be used during the annu	al facility vacation
shutdown.	
Is the facility shutting down for vacation?YesNoN/A	
If ves, provide dates	

NBC DENTAL FACILITY INSPECTION CHECKLIST

NARRAGANSETT BAY COMMISSION



Inspection Checklist For Dental Facilities

Compa	any Name:				
Facility Inspec	ty Address:NBC Inspector(s):				
	Person(s) met with:				
<u>Part I</u>	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:				
(1)	II - Requirements/Progress Since Last Inspection What was required of the firm since the last inspection?				
(2)	Has required work been completed? Y If no, when will it be completed?	es	No		
(3)	1 1 ,	time' es	? 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? Y If no, detail the compliance issues and discuss with the user.		No		

Part III – Amalgam Separator Maintenance/Installation Information

(1)	Has the amalgam separator been installed according to NBC approved pl		
	If no, what needs to be corrected?	Yes	No
	-		
>	* Compare plans with existing system.		
(2)	Have changes been made without NBC notification and approval?	gu'"Pq	
	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 washing only.	for equip	oment
(12)	Are chair side traps present on all dental chairs? Yes Verify that chair side traps are being inspected daily and cleaned or replanecessary.	No aced as	
(13)	Type of line cleaner used:		
(14)	Is elemental mercury stored onsite? If yes, how is it stored and disposed	of?	

<u>Part IV – X-Ray Processor System Information</u>

(1)	Is x-ray processing performed at this facility?	Yes	No
(2)	Are there discharges to the sewer from x-ray processing operations? If yes, detail discharges.	Yes	No
(3)	Is there a silver recovery unit in place? Yes No		
(4)	Has silver recovery unit been installed according to NBC approved pl If no, what needs to be corrected?		
(5)	*Compare plans with existing system. 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	<u>;</u> ?	
	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, main replacement)?	ntenance Yes	, filter 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 follow	wing?	
	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 of the tank from which the discharge occurred? Yes	and a de	escription 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: Permit/Logbook Requirements: Monitoring and Reporting Requirements/Procedures:	Yes Yes Yes	No No No
Comme	ents:		
What w	vill be required of firm?		

NBC FOOD PREPARATION ESTABLISHMENTS INSPECTION CHECKLIST

NARRAGANSETT BAY COMMISSION



Inspection Checklist For Food Preparation Establishments

Inspection I	Date:				
	ame:				
	lress:				
-	Engineer:				
Person(s) m	et with:				
Dowt I For	cility Information				
ranti – ra	<u>cility Information</u>				
(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,				rmit fee
	billing purposes?	Yes	No		
(10)	Menu on file?	Yes	No		
(11)	Drive through window?	Yes	No		
Part II - Re	equirements/Progress Sinc	<u>e Last Ins</u>	<u>pection</u>		
(1)	What was required of the firm	since the las	t inspectio	on?	
` '	Has required work been complete		Yes	No	N/A

Part III - GRU Maintenance/Installation Information

(1) Has grease removal system been installed according to Yes	NBC app No	proved	plans? * N/A
If no, what needs to be corrected?			
* Compare plans with existing system.			
(2) Have changes been made without NBC notification and fixtures, menu, grease removal unit, etc.) Yes No	approv N/A		tchen
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 Is the logbook being maintained at the required frequen	Week		Ionthly Io
(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
art V - User Education			

<u>Par</u>

(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?			_
	 	<u> </u>	

NBC SEPTAGE TRUCK INSPECTION CHECKLIST

Lincoln Septage Facility Septage Truck Inspection Checklist

Inspector:	The second secon
Inspection Date:	
Septage Hauler:	
Vehicle Inspected:	
Drivers Name:	
NBC Volume Sticker In Place NBC Permitted User Sticker in Place NBC Computer Chip In Place	hicle Inspection ☐ Yes ☐ No - Call State Police ☐ Yes ☐ No - Issued NOV
Pap	perwork Review
Manifest Properly Completed	☐ Yes ☐ No – Issued Nov and Refuse Load.
If No, List Problems:	
	The second secon
Waste D	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.
Education	nal Procedure Review
Manifest Paperwork Completion proce Grease Policy reviewed with driver	edure was reviewed with driver
Other Comments:	

NBC SAMPLING, REPORTING, AND CHAIN OF CUSTODY FORMS



The Narragansett Bay Commission Pretreatment Program

Pretreatment Program 2 Ernest Street Providence, RI 02905

Field's Point District Self-Monitoring Compliance Report

Address of Premises San			
Date(s) Sampled:	.p.ou		
Permit Sampling Month S	atisfied:		
Samples Taken By:			
Camples Analyzed By:	(Name)	(0	Company)
Samples Analyzed By:	(Company)		
Type of Sample: Grab_ If Grab Sample, what time		Composite	
If Grab Sample, what time	e(s) was sample take	n?	
If Composite Sample, des	scribe how composite	was taken	
Where was sample taken			
Water Meter Readings (L	ist readings for all m	eters discharging to sa	ampling location)
J (#1	#2	#3
Closing Reading:		#2	
Opening Reading:			
Total:			
Units (Circle One):	Cubic Feet/Gallons	Cubic Feet/Gallons	Cubic Feet/Gallons
	Other (Specify):	Other (Specify):	Other (Specify):
Were any batch discharg	aken from?		
Indicate volume of batch	discharge:		
Is this analysis a resampl violation? Yes N		nstrate compliance wi	th a previous
What is the sample identi number(s) indicated on the			
Is this analysis in full com		andards listed on the b	pack of this form?
If your firm was in violatio	n, what was the caus	se of the violation?	
What steps will be taken 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*

	Maximum Daily Concentration Limit	Monthly Average Concentration
Parameter	(mg/l)	(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	L	imitation (Maximum)
Total Toxic Organics (TTO)		2.13
Biochemical Oxygen Demand (Be	OD)	300.00 **
Total Suspended Solids (TSS)	- ,	300.00 **
Total Oil and Grease (fats, oils ar	nd grease)	125.00
Oil and Grease (mineral origin)		25.00
Oil and Grease (vegetable origin)	1	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 seg.

The Narragansett Bay Commission
Pretreatment Program
2 Ernest Street Providence, RI 02905

Bucklin Point District Self-Monitoring Compliance Report

Company Name:			
Address of Premises Sam	npled:		
Date(s) Sampled: Permit Sampling Month S			
Permit Sampling Month S	atisfied:		
Samples Taken By:			
Comples Analyzed Dy	(Name)	(0	Company)
Samples Analyzed By:	(Company)		
Type of Sample: Grab_	(Company)	Composite	
If Grab Sample, what time	e(s) was sample take	 n?	
If Composite Sample, des			
	•		
Where was sample taken	?		
Water Meter Readings (L	ist readings for all m	eters discharging to sa	ampling location)
	#1	#2	#3
Closing Reading:			
Opening Reading:			
Total:			
Units (Circle One):	Cubic Feet/Gallons	Cubic Feet/Gallons	Cubic Feet/Gallons
	Other (Specify):	Other (Specify):	Other (Specify):
Were any batch dischard What tank was sample to Indicate volume of batch	aken from?		
Is this analysis a resampli violation? Yes No		nstrate compliance wi	th a previous
What is the sample identi number(s) indicated on th	• • •	-	
Is this analysis in full com	•	andards listed on the b	pack of this form?
If your firm was in violatio	n, what was the caus	e of the violation?	
What steps will be taken be continuous basis?		-	
When will these steps be			

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*

	Maximum Daily Concentration Limit	Monthly Average Concentration
Parameter	(mg/l)	(mg/l)
	(3)	(3)
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	Lim	itation (Maximum)
T T		0.40
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 g	jrease)	125.00
Oil and Grease (mineral origin)		25.00
Oil and Grease (vegetable origin)		100.00
pH range (at all times)	a anasified	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:	Narragan (401) 461		
Company Name:			
Facility Address:			
		Bay Commission (NBC) that the arthe following parameter(s):	above-referenced facility violated
Sampling Date of V	<u>iolation</u>	<u>Parameter</u>	Concentration
four (24) hours and w NBC discharge limita were properly prepare assure that qualified prinquiry of the person information, the information, the information in the possibility of fine and Initial sampling and a	vill immeditions.* I conductions.* I conducted under my ersonnel properson mation is, to re are signification in the conducted under the conducted	aware of the above-referenced vi- ately resample this wastestream for certify under penalty of law that the y direction or supervision in accor- toperly gather and evaluate the information of the best of my knowledge and be- nificant penalties for submitting ent for knowing violations.	or the parameter(s) exceeding the his document and all attachments rdance with a system designed to primation submitted. Based on my ose responsible for gathering the elief, true, accurate, and complete false information including the thin 30 days of the sample date
discharge limitations.	ig must co	infinite until four consecutive sam	ples show comphance with NBC
		Signature of	Authorized Agent

 $[\]ensuremath{^{*}}$ Resampling is not required for exceeding BOD or TSS limits.

CONTINUOUS DISCHARGE PH MONITORING REPORT MONTH OF: _____ 20 ____



	Address:				Pretreatment	Section
					2 Ernest Stree	et
					Providence, R	II 02905
Date	MAXIMUM pH	MINIMUM pH	AVERAGE pH (VISUAL)	VOLUME/ METER R IF REQU	EADING	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					+	
certify unwith a systoerson or person or person or personsibility	tem designed to assupersons who manage and belief, true, acc	ure that qualified pe e the system, or tho curate and complete ment for knowing vio	rsonnel properly gath se responsible for ga s. I am aware that the plations. I certify the a	ner and evalua athering the infere ere are signification	te the information formation, the infant penalties for	direction or supervision in accordan n submitted. Based on my inquiry of formation submitted is, to the best of submitting false information including directly from the recording chart of th

Title

Name (Print)

BATCH DISCHARGE Ph MONITORING REPORT MONTH OF: _____ 20 ____



С	ompany Name Address					Return to:	Pretreatme	ett Bay Con ent Section treet e, RI 02905	nmission
	Batcl Dischar		Batch I Discharge II				Batch Discharge IV		
Date 1	Final pH	Vol.	Final pH	Vol.	Final pH	Vol.	Final pH	Vol.	COMMENTS
2									
3									
4									
5 6									
7									
8									
9									
10									
11									
12 13									
14									
15									
16									
17									
18									
19									
20									
21 22									
23									
24									
25									
26									
27									
28									
29	+								
30 31									
Please in	stem designed persons who r	law that to assure manage t ue, accur	this document that qualified the system, or tate and comp	t and all a personne those res lete. I am	el properly gathe ponsible for gat aware that there	er and evalu hering the i	ate the inform	ation submit	n or supervision in accordance ted. Based on my inquiry of th submitted is, to the best of m ig false information including t
Signature						Date			

Title

Name (Print)

Zero Process Wastewater Discharge Certification

	For the Month of	, 20
Company Name:		
		RETURN TO:
Address:		Narragansett Bay Commission
		Providence, RI 02905
I,		, as authorized representative of
	, do hereby decree that no proce	ess wastewater was discharged into
the Narragansett Bay	Commission sewer system for the	he past six (6) month period.
,	·	1
Date of Meter Readi	ngs:	
Meter Number	Water Meter Readings	Units (cf, gal.)
Meter #1		
Meter #2		
Meter #3		
direction or supervision gather and evaluate the the system, or those re knowledge and belief,	n in accordance with a system designer information submitted. Based on responsible for gathering the information true, accurate, and complete. I am a	tachments were properly prepared under my ned to assure that qualified personnel properly my inquiry of the person or persons who manage ion, the information submitted is, to the best of my aware that there are significant penalties for ne and imprisonment for knowing violations.
Authorized Represer	ntative Signature	Date

Attachment A

Zero Process Wastewater Discharge Certification

For the Six (6) Month Period from _____ to ____ Company Name: **RETURN TO:** Address: 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: Meter Number Water Meter Readings Units (cf, gal.) 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

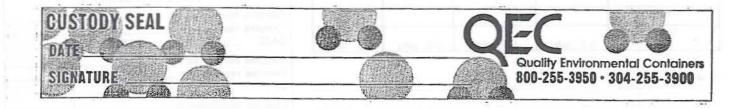
For the 12-month period from	, 20	_ to _	, 20
Company Name:			_
			Dustus star and Dus susan
I,	, as author	rized re	epresentative of
	, do hereby	decre	e that the Narragansett Bay
Commission Best Management Practic	ces for the Managemen	t of W	aste Dental Amalgam have been
fully complied with for the past twelve	e month period.		
I certify under penalty of law that thi my direction or supervision in accord properly gather and evaluate the inf persons who manage the system, or the submitted is, to the best of my knowl there are significant penalties for sub imprisonment for known violations.	ance with a system destormation submitted. nose responsible for garedge and belief, true, a	signed Based thering ccurat	to assure that qualified personnel on my inquiry of the person or g the information, the information e, and complete. I am aware that
Authorized Representative Signature		Date	

NARRAGANSETT BAY COMMISSION SAMPLE SUBMISSION SHEET

SOURC	CE:_						2.12		EMI	DA#_	#	TI	ME: DA	ΓE:		
CITY/S	TAT	F·							COL	LECTI	D BY	11	VIE.			
SAMPL	EL	OCA	TIO	N:					FAC	ILITY	CONTA	CT:				
INSTR	UCT	ION	S:													
			_													
						DA	DAR	rrr	DC F	on /	MALATA	/CIC+				
											NALY					
Cd_	(TD	15				A	3				B	OD (5	day)			-
Cr (lota	1) —	77.			Zn			-		E	22 				
—Ci ((11CX	.)			-	—CI	V (Tota	al)			_T	PH				
Pb						V(OC				())			
Ni _						Ex	t				()			
*All and	alyses	s do	ne ac	cording	10 4	10 CF	R part	136.	Results	reporte	d in mg/	l unles	s specified	d otherw	vise.	
					FI	ELD) AN	D PF	RESE	RVAT	I NOI	ATA	1			
	Sa	mpl	e l	nform	atio	n				reser	vation	Cher	nicals	Added	i	
Sample No.		ple Tir art/Stop		Analyze For		ample Type G) or (C)	Initial pH	Nitric Acid (ml)	Hydro- Chloric Acid (ml)	Res. CI (+) or (-)	Lead Acetate (+) or (-)	NaOH (ml)	Ascorbic Acid (g)	Other	Final pH	Sealed By
A																
В												en la maria				
C																
D			\neg													
E								pini I			-					
F												-				
G					+											
H					+											
I	-		\neg		+											
J			\neg		+			-		t	1				_	
K	-	-	$\neg \uparrow$		+	-				 	1		-		-	
L					+	-				 	-		 			
M			-	-	+				-		-		-			
Did us	05.0		nt c	colit	05	ranl	icate	campl	e?	1	L					
Sample	1	A	В	C	D	E	_	G	Н	IJ	K	L	М	Sign	nature	
Yes		-	- D	-		-	1				1"			0.6	Jacuic	
No														- 7.00 × 1		
	D		1 34.	#1	340	ter #2	7 134	eter #3	Meter	#4						
Meter	ose	ings	Me	ter #1	IVIE	ici #.	2 1010	(61 #3	IVICICI	#4			CHAIN OF CI	USTODY		
01	pen		-	-		1172	+		-	\neg	Samples	transferr	ed by:	o 655	Salin	Π
To	otal										Samples DATE:	received	by:T	INAE-		
			(c.	., gals)	(c.	f., gals)	(c.	f., gals)	(c.f., g	als)	1		ed by:			
REMARKS											Samples	received	by:T		4211	
HEMANAG	,		_													-
											Samples	received	ed by: by:			
											DATE:		т	IME:		
RESULTS					-	-										
RESULTS	REPO	RTED	ON:													

+	TT BAY COMMISSION
Source	
Sample ID	
nitials of Collectors:	
Place of Collection:	
Date Sampled	Time Sampled
Analysis Requested	
Rec'd From	*
Rec'd By	Time

There are no see a second	processoris		PROPERTY.
CUSTODY SEAL			
		UEL	
TDATE 4	AND	Quality Env	ironmental Containers
CICUATURE			950 · 304-255-3900
Sidnatone			



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 su	ttals to the Narragansett Bay Commission on behalf of
	and that said submittals are duly signed for and
in behalf of said corpora	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)

November 22, 2017

Mr. Lawrence Gallagher Liquid Blue 1 Crownmark Drive Lincoln, RI 02865



Dear Mr. Gallagher

The sample results for October which were received by this office on November 15, 2017 indicate that you are in violation of discharge limitations for the following:

Sample Location #1

Sample Date		Sample Type	Sample Result	Standard Type	Max. Limit	Avg. Limit
10/6/2017	ZINC	Composite	2.16	LOCAL	1.67	1.39

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)

April 03, 2017

Mr. Michael Provencal John H. Collins & Sons Company P.O. Box 741 Pawtucket, RI 02862-0741



Dear Mr. Provencal

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 February 28, 2017. These results indicate that you are in violation of Narragansett Bay Commission (NBC) discharge limitations for the following:

Sample Location #1

Sample Date		Sample Type	Sample Result	Standard Type	Max. Limit	Avg. Limit
2/28/2017	TTO	Composite	51.949	LOCAL	2.13	0.00

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

MA De

WASTEWATER SAMPLE ANALYSIS



Company Name:

John H. Collins & Sons

Company

Company Address:

Dunnell Lane

Pawtucket, RI 02860

Location Name:

Sample Location # 1

Type of Sample:

Composite

Date of Sample:

February 28, 2017

13.6
0.015
0.075
0.06
0.018
0.075
0.05
5.01
4
0.025
23.5
51.949
28.51
0.246

Reviewed By:

nts 92

Nathan P. Daggett Pretreatment Engineer

NOTICE OF VIOLATION AVERAGE LIMIT VIOLATION



October 31, 2017

Mr. Michael O'Keefe Ecological Fibers, Inc. 730 York Avenue Pawtucket, RI 02861

Dear Mr. O'Keefe:

The results of sampling conducted at your firm for the month of September-2017 show that you are in violation of average discharge limitations for the following:

Sample Location #1

Parameter	# of Analyses	Standard Type	Avg. Conc.	Avg. Limit	Type
ZINC	1	LOCAL	1.54	1.39	NBC
	ix .				MONTHLY

As a condition of your Wastewater Discharge Permit and as required by U.S. EPA regulations, monthly average discharge limitations must be met at all times. Failure to meet the monthly average standards may result in the NBC initiating enforcement action against your firm and the possible publication of your company's name in the NBC annual list of firms in Significant Non-Compliance which is published each year in the PROVIDENCE JOURNAL. Therefore it is important to always be in compliance with the monthly average discharge concentration, in addition to the maximum discharge limit. It is strongly recommended that you sample early each required sampling month to allow adequate time to resample in that month, should the initial result indicate that the monthly average limit was exceeded.

Please note that the NBC Office of Pollution Prevention is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848 Ext. 352. If you should have any questions regarding this letter, contact me at 461-8848 Ext. 490.

Sincerely

Travis Costa

Senior Pretreatment Technician

Notice of Violation Failure to Meet Standards (Manhole)



September 18, 2017

Mr. Frank A. DiFruscio DiFruscia Industries, Inc. 1425 Cranston Street Cranston RI, 02920

Dear Mr. DiFruscio:

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 August 2, 2017 the NBC conducted surveillance manhole sampling up and down stream of your facility. The analytical results from the upstream manhole indicate full compliance with NBC discharge limitations. However, the analytical results from the down stream manhole indicate noncompliance with the following parameters:

		Results	Daily Maximum	Average
Parameter	Sampling Type	(mg/L)	(mg/L)	(mg/L)
Nickel	Composite	5.63	1.62	1.62
Zinc	Composite	28.4	2.61	1.48

It has been determined that your firm is the sole source of the non-compliant wastewater since the upstream results were in full compliance. You must submit a report by October 15, 2017 detailing the cause of the high concentration of metals and a proposal to ensure that wastewater from your facility is in compliance at all times.

Please note that the NBC is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848.

If you have any questions regarding this letter, please contact me at 461-8848 ext. 490. Sincerely,

Nathan P. Daggett Pretreatment Engineer

Attachment



Manhole Sample Analysis

Company:

DiFruscia Industries, Inc.

Address:

20-A Starr Street, Johnston, RI 02919

Date of Sample:

August 2, 2017

Type of Sample:

Composite

Parameter	Upstream Manhole Concentration (mg/L)	Downstream Manhole Concentration (mg/L)
Cadmium	< 0.015	< 0.015
Chromium	< 0.075	0.149
Copper	0.0238	0.630
Lead	< 0.075	< 0.075
Nickel	< 0.05	5.63
Silver	< 0.025	< 0.025
Zinc	0.138	28.4

Reviewed by:

Nathan J. Dean

Assistant Pretreatment Manager

Notice of Violation Failure to Immediately Report Violation

November 27, 2017



Mr. Victor Maia
Denison Acquisition Company, LLC
d/b/a Denison Pharmaceuticals, LLC
1 Powder Hill Road
Lincoln, RI 02865

Dear Mr. Maia:

The Self-Monitoring Compliance report which was received by this office on November 09, 2017 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,

Nathan P. Daggett Pretreatment Engineer

NOTICE OF VIOLATION NOTICE OF PH VIOLATIONS



October 17, 2017

Mr. Anildo DeSenna Ideal Plating & Polishing Co., Inc. 175 Public Street Providence, RI 02903

Dear Mr. DeSenna

I have reviewed the August pH Monitoring Report submitted on October 06, 2017. Based upon this report, your facility has exceeded the pH discharge limitation as follows:

LOW LIMIT VIOLATIONS

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,

Nathan P. Daggett Pretreatment Engineer December 27, 2017



Mr. Emilio Cardillo Ocean State Peeled Potatoes 1587 Plainfield Pike Johnston, RI 02919

Dear Mr. Cardillo:

Enclosed please find the results of the analyses performed by the Narragansett Bay Commission (NBC) Laboratory on a sample collected by NBC personnel at your facility on December 13, 2017. These results indicate that your firm has exceeded NBC surcharge limitations for the following:

Samp	le	Location	#	1
				-

Sample Date	Parameter	Sample Type	Sample Results	Surcharge Limitation
12/13/2017	TSS	COMPOSITE	6676	300
12/13/2017	BOD	COMPOSITE	4847.14	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,

Kyle C. Gannon

Pretreatment Technician

WASTEWATER SAMPLE ANALYSIS



Company Name:

Ocean State Peeled

Potatoes

Company Address:

1587 Plainfield Pike

Johnston, RI 02919

Location Name:

Sample Location # 1

Type of Sample:

Composite

Date of Sample:

December 13, 2017

Parameter	Concentration (mg/l)
AMMONIA	12.5
BOD	4847.14
Nitrate+Nitrite	0.82
TKN	130
TSS	6676
Total Nitrogen	130.82

Reviewed By:

Kyle C. Gannon

Pretreatment Technician

NOTICE OF VIOLATION FAILURE TO SUBMIT COMPLIANCE REPORT



November 15, 2017

Mr. Stephen Pogorilich Summit Manufacturing Corporation 248 Pine Street Pawtucket, RI 02860

Dear Mr. Pogorilich:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit compliance monitoring results for the month of:

Sample Location #1

September 2017

To date, the Narragansett Bay Commission (NBC) has not received the above referenced analytical results. Until a signed 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 30 days from the due date will result in your firm being in Significant Non-Compliance with both NBC and EPA regulations and will automatically result in the publication of the name of your firm in the NBC annual list of violators in the Providence Journal. Please note that the NBC will bill you for the cost of this public notice. In addition, the NBC 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,

Nathan P. Daggett Pretreatment Engineer

NOTICE OF VIOLATION FAILURE TO SUBMIT PH MONITORING REPORT



December 01, 2017

Mr. Devin Kelly Isle Brewers Guild 461 Main Street Pawtucket, RI 02860

Dear Mr. Kelly:

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 2017

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,

Kyle C. Gannon

Pretreatment Technician

NOTICE OF VIOLATION FAILURE TO SUBMIT CERTIFICATION OF NO DISCHARGE

The Name of the Park Commission

November 15, 2017

Mr. David Habershaw D & D Chrome Plating 355 Dexter Street Providence, RI 02907

Dear Mr. Habershaw:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit a Certification of No Discharge for the month of:

September 2017

To date, the Narragansett Bay Commission (NBC) has not received the above referenced Certification of No Discharge. Until a signed copy of the above referenced certification has been received, you are in violation of the terms of your permit. Failure to submit Certifications of No Discharge within 30 days from the due date will result in your firm being in Significant Non-Compliance with both NBC and EPA regulations and will automatically result in the publication of the name of your firm in the NBC annual list of violators in the Providence Journal. Please note that the NBC will bill you for the cost of this public notice. In addition, the NBC 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,

Nathan P. Daggett

VAS &

Pretreatment Engineer

NOTICE OF VIOLATION FAILURE TO SUBMIT BMP CERTIFICATION



January 12, 2018

Dr. Eglantina Kica Eglantina Kica, D.M.D. 388 Armistice Boulevard Pawtucket, RI 02861

Dear Dr. Kica:

In accordance with your Wastewater Discharge Permit, it is necessary for you to submit Best Management Practice (BMP) Certification for the period ending:

November - 2017

To date, the Commission has not received a copy of the above referenced certification. Until a signed copy of the above referenced certification is received, you are in violation of the terms of your permit. Failure to submit BMP Certification within thirty (30) days of the due date will result in your firm being in Significant Non-Compliance (SNC) with the NBC and EPA regulations and will automatically result in the publication of the name of your firm in the NBC annual list of violators published in the Providence Journal. Please note that the NBC will bill you for the cost of this public notice. In addition, the Commission may initiate enforcement action against your firm for failing to submit reports on time. Should such an enforcement action be initiated, administrative penalties of up to \$25,000 per violation per day can be assessed.

Sincerely,

Nathan Daggett

Pretreatment Engineer

ND:sm

NOTICE OF VIOLATION FAILURE TO ANALYZE FOR ALL REQUIRED PARAMETERS



October 24, 2017

Mr. Carlos Durango 9W Halo OpCo LP 482 Pawtucket Avenue Pawtucket, RI 02860

Dear Mr. Durango:

I have reviewed the July 31, 2017, August 1, 2017 August 2, 2017 and August 3, 2017 Baseline Monitoring compliance reports you submitted on August 25, 2017. In accordance with the conditions of your permit, you were to have analyzed the sample from the sample port on the final discharge line, Sample Location # 1 for BOD, TSS, TTO, Cadmium, Chromium, Copper, Lead, Nickel, Silver and Zinc. The aforementioned samples were not analyzed for Cadmium, Chromium, Copper, Lead, Nickel, Silver and Zinc. In order to fulfill this monitoring requirement, you were required to collect an additional samples from the aforementioned sample location. These samples have since been received by the Narragansett Bay Commission therefore no additional action is required at this time.

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

Sincerely

Brian Steere

Pretreatment Technician

BS:ad

D1 1 T1 102005 - 401 471 0040 - 401 461 0176

NOTICE OF VIOLATION FAILURE TO SATISFY NBC REQUIREMENTS



December 01, 2017

Mr. Robert A. Montaquila Aro-Sac, Inc. 1 Warren Avenue North Providence, RI 02911

Dear Mr. Montaquila:

Per the requirements of letter(s) from this office, the following item was required to be completed and/or submitted by the due date indicated below:

Required Submittal Notice Issue Date Due Date
Permit Application Letter 10/20/2017 11/17/2017

You must satisfy the past due NBC requirement as detailed in the above referenced documents. Your failure to complete the aforementioned requirement within thirty (30) days from the specified due date will place your firm in Significant Non-Compliance (SNC) with Commission regulations and will automatically result in the publication of the name or your firm as a violator in the PROVIDENCE JOURNAL. Your continued failure to complete this requirement may result in the initiation of enforcement action against your firm. Please note that the Commission can assess administrative and civil penalties of up to \$25,000 per violation per day should an enforcement action be initiated.

If you should have any questions regarding this matter, contact me at 461-8848 ext 490.

Sincerely,

Kyle C. Cannon

Pretreatment Technician

NOTICE OF VIOLATION LETTER OF DEFICIENCY



December 5, 2017

Mr. Mark Federico Providence Specialty Products 177 Georgia Avenue Providence, RI 02905 Certified Mail
Return Receipt Requested

91 7108 2133 3937 9677 9483

Dear Mr. Federico:

This letter serves to summarize the Narragansett Bay Commission (NBC) annual inspection of your facility conducted on October 17, 2017. During the inspection the following deficiencies were noted:

- 1. During the inspection, a calibrated NBC pH pen showed that your effluent pH recorder is not properly calibrated. Immediately, you must calibrate your effluent pH meter to accurately monitor and record the effluent pH of the wastewater discharged from your facility. You must continue this pH probe calibration regularly on at least a monthly basis and the pH probe must be cleaned at least weekly. The Narragansett Bay Commission has developed the following procedure to ensure that all pH probe calibrations are consistently performed. This procedure must be used each time pH probe calibration is conducted. Prior to calibrating the pH probe, all process discharge must cease. The pH chart must be advanced, and a line drawn across the chart to indicate the beginning of calibration. Below this line, the following information must be written on the chart: the date, time and person performing the calibration. A line must be drawn on the chart indicating the end of calibration and the chart paper must again be advanced. Process discharges may resume when the calibration has been completed. By following this procedure, calibration spikes will not be required to be reported on the monthly pH Monitoring Reports. Please note that process discharges are prohibited any time that the pH recording device is not fully operational. This pH system maintenance, including probe calibration and cleaning data, must be recorded in your pretreatment system log book.
- 2. Your firm is not maintaining a logbook documenting pH probe cleanings and calibrations for the pH probe in the outdoor in-ground grease interceptor. You must immediately begin to record the aforementioned information in your pretreatment system logbook. Should your firm require assistance with your log book requirements and/or pH reporting, I am available to assist your firm.

Failure to correct the above-mentioned deficiencies can result in the initiation of enforcement action against your firm. Please note that the Commission can assess administrative penalties of up to \$25,000 per violation per day.

Please note that the NBC is available to provide free technical assistance to your firm. For information regarding how the Pollution Prevention Program can help your firm achieve and maintain compliance, contact Mr. James McCaughey at 461-8848 ext. 352.

If you have any question, please contact me at 461-8848 ext. 490.

Sincerely,

Abigail Bernier

Principal Pretreatment Engineer

AB:ACP

The Narragansett Bay Commission One Service Road Providence, Rhode Island 0.2905

401 • 461 • 8848 401 • 461 • 6540 FAX 111 (REREIAY OPLRATOR) 711

http://www.nacrabav.com

April 27, 2017

Kelvin Sanders Rain Car Wash 150 Vandewater Street Providence, RI 02908



Certified Mail
Return Receipt Requested

Vincent I. Mesofella Chairman

Raymond J. Marshall, E.F. Executive Director

Re: Rain Car Wash Administrative Order # FP-01-17

Dear Mr. Kelvin Sanders:

I recently reached out to you to discuss ongoing violations of the Narragansett Bay Commission (NBC) Wastewater Discharge Permit #P9702-188-0920, which was issued to Rain Car Wash on October 27, 2015. My office has tried to contact you by phone and by certified mail in an attempt to resolve these violations without having to escalate to formal enforcement proceedings. Unfortunately, I have not received any response from you or any other representatives of Rain Car Wash. Therefore, the NBC is obligated to escalate this action with the issuance of an Administrative Order.

Enclosed please find Administrative Order # FP-01-17 issued to Rain Car Wash, by my client, the NBC, for Rain Car Wash's violations of its NBC Wastewater Discharge Permit, the NBC's Rules and Regulations, and Rhode Island General Laws, Title 46, Chapter 25.

In accordance with this Order, Rain Car Wash must submit a proposed plan for the installation of an oil and solids/grit removal system or other solids retention device to be approved by the NBC to comply with the Permit within twenty-one (21) days of receipt of this Order. Within thirty (30) days of receiving approval of said plans, Rain Car Wash must install the system and immediately begin complying with the Permit, including submitting Self-Monitoring Compliance Reports and analytic results for total oil and grease for the two outstanding samples.

Furthermore, Rain Car Wash must pay an Administrative Penalty to the NBC of FOUR THOUSAND DOLLARS (\$4,000) within twenty-one (21) days of receipt of this Order.

Pursuant to RIGL §§ 46-25-25(d), 42-17.1-2(21), and the NBC's Rules and Regulations, Rain Car Wash may preserve its right to a hearing by filing a written request to the NBC's Executive Director within ten (10) days of service. You may also request a status conference at that time.

Should you have any questions concerning this matter, please contact my office at (401) 461-8848 extension 320.

Sincerely,

Chloe A. Davis, Esq.

Legal Counsel

Narragansett Bay Commission

One Service Road

Providence, RI 02905

Tel: (401) 461-8848 ext. 320

Fax: (401) 784-3527

E-Mail: cdavis@narrabay.com

*Admitted in RI and MA

cc: Kelvin Sanders

95 Tonawanda Avenue Dorchester, MA 02124

Laurie Horridge, Esq. – NBC Thomas Uva – NBC Kerry Britt – NBC

Enclosure

NARRAGANSETT BAY WATER QUALITY MANAGEMENT DISTRICT COMMISSION

ADMINISTRATIVE ORDER # FP-01-17

IN THE MATTER OF:

RAIN CAR WASH 140 VANDEWATER STREET PROVIDENCE, RI 02908 ADMINISTRATIVE ORDER AND PENALTY ASSESSMENT

AND

KELVIN SANDERS 95 TONAWANDA AVENUE DORCHESTER, MA 02124

LEGAL AUTHORITY

The following findings are made and order issued pursuant to the authority vested in the Narragansett Bay Water Quality Management District Commission (NBC) under Rhode Island General Laws (R.I.G.L.) 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 the NBC to acquire, plan, construct, extend, improve, operate and maintain the sewerage system and treatment facilities in the district. The Act authorizes the NBC to 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 the NBC to establish a sewage pretreatment program and to enforce any violations of the Act and any rule, regulation, permit or administrative order issued pursuant thereto.

R.I.G.L. § 46-25-25.2 prescribes that persons violating provisions § 46-25-25 through § 46-25-25.3 of the Act or of any permit, rule, regulation or order issued pursuant thereto shall be subject to a civil penalty of not more than twenty-five thousand (\$25,000) dollars per day for each violation and authorizes the NBC to obtain actual costs and reasonable attorney's fees incurred by the NBC in seeking compliance, penalties or damages. Furthermore, R.I.G.L. § 46-25-25.3 provides that any person found guilty of violating, willfully or with criminal negligence, any of the aforementioned provisions or of any permit, rule, or regulation issued pursuant thereto shall be punished by a fine of not more than twenty-five thousand (\$25,000) dollars and/or imprisonment of not more than one year for each enumerated violation.

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 NBC Rules and Regulations Article 10.

STATEMENT OF FACTS

- Rain Car Wash is a Rhode Island corporation conducting car wash operations, which discharge process wastewater containing pollutants into the NBC's facilities.
- 2. Rain Car Wash is a user of the NBC's facilities as defined by the NBC's Rules and Regulations, Article 2.
- 3. In accordance with the Act and the NBC's Rules and Regulations, the NBC issued Wastewater Discharge Permit #P9702-188-0920 to Rain Car Wash (Permittee) on or about October 27, 2015 authorizing the Permittee to discharge into the NBC's facilities so long as the Permittee adhered to the conditions of its permit and complied with the NBC Rules and Regulations.
- 4. According to Section D of the permit, Rain Car Wash was required to "install an oil and solids/grit removal system," and the plans for the installation of such a device were required to be submitted to and approved by the NBC within one (1) month of the effective date of the permit. Section E of the permit required Rain Car Wash to collect biannual samples, during the months of March and September, from an approved sampling location, and analyze the sample for "total oil and grease (fats, oils and grease)."
- 5. At the time that the permit application was submitted and again after the permit was issued, Kelvin Sanders, Rain Car Wash's president, was informed that the company would be required to install an oil and solids/grit removal system or other solids retention device and that plans for such a device were required to be submitted no later than one (1) month after the permit was issued.
- 6. As of the date of the issuance of this Administrative Order, the NBC has not received the required plans for installation of the required pretreatment device, making the violation long over 120 days past due. To date, Rain Car Wash has not indicated to the NBC that the required pretreatment device was ever installed.
- Numerous Notices of Violation were issued to Rain Car Wash between December
 2, 2015 and March 1, 2017 for failure to submit the required pretreatment plans.
- 8. A legal letter was sent from the NBC's legal department, dated March 11, 2016, to inform Kelvin Sanders that Rain Car Wash had failed to submit pretreatment plans, that the plans had been overdue since November 27, 2015, and that the several Notices of Violation issued to Rain Car Wash had presumably been ignored. Mr. Sanders was reminded that the failure to submit pretreatment plans was a violation of his Wastewater

Discharge Permit and the NBC Rules and Regulations, which authorized the NBC to take escalated legal action to enforce the terms of the permit.

- 9. On or about April 14, 2016, NBC personnel hand-delivered the legal letter dated March 11, 2016 and attempted to conduct an unannounced inspection of Rain Car Wash. However, an employee of Rain Car Wash denied the NBC personnel access to the facility to conduct an inspection.
- 10. A letter dated April 28, 2016 was sent to Kelvin Sanders at the business address of Rain Car Wash indicating that NBC personnel were prevented from conducting a facility inspection and reminding Mr. Sanders that the permit authorizes the NBC to conduct inspections. Enclosed with the letter was a handout that summarizes the NBC inspection powers.
- 11. As of the date of the issuance of this Administrative Order, the NBC has not received the required Self-Monitoring Compliance Reports including analytical results for total oil and grease from the samples that were required to be collected during the months of March, 2016 and September, 2016. To date, Rain Car Wash has not indicated to the NBC that samples have ever been collected and analyzed.
- 12. Numerous Notices of Violation were issued to Rain Car Wash between May 2, 2016 and March 3, 2017 for failure to submit compliance monitoring results.
- 13. A second legal letter was sent from the NBC's legal department, dated August 16, 2016, to inform Kelvin Sanders that the company had failed to submit the sampling report for the month of March and that the several Notices of Violation issued to Rain Car Wash had presumably been ignored. Mr. Sanders was reminded that the failure to submit the monitoring report was a violation of his Wastewater Discharge Permit and the NBC Rules and Regulations, which authorized the NBC to take escalated legal action to enforce the terms of the permit.
- 14. The legal letter dated August 16, 2016 was sent certified mail return receipt requested to the Rain Car Wash business address at 140 Vandewater Street, Providence, RI 02908. The original certified mail was returned to the NBC on September 14, 2016 and the USPS tracking information demonstrated that a notice was left at the business on August 20, 2016, that no authorized recipient was available on that date, and that the certified mail went unclaimed until the maximum hold time, when the letter was returned to the NBC.
- 15. On October 11, 2016, NBC personnel sent by certified and regular mail another letter to Kelvin Sanders at the Rain Car Wash business address and regular mail to Mr. Sander's home address. In response to the persisting violations and unanswered Notices of Violation, this letter demanded that Mr. Sanders attend a mandatory meeting at the NBC Pretreatment office on November 3, 2016 at 10:00 a.m. Again, this letter went unclaimed and was returned to the NBC as undeliverable. Neither Mr. Sanders nor any

other representative of Rain Car Wash responded to nor appeared at the mandatory meeting.

THEREFORE, based on the above findings, Rain Car Wash is hereby notified of the following violations:

<u>Violation A:</u> Failure to submit plans for the installation of an oil and solids/grit removal system or other solids retention device in violation of the Permit, the NBC Rules and Regulations, and the Act.

<u>Violation B:</u> Failure to submit Self-Monitoring Compliance Reports and analytical results for total oil and grease on two (2) occasions in violation of the Permit, the NBC 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.
- (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 persons 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),
 - (3) Are necessary and appropriate for the project.
- (b) Further, the NBC 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. ...
- (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. ...

Civil penalties: § 46-25-25.2:

- (a) Any person who shall violate the provisions of §§ 46-25-25 46-25-25.3, 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(a)(4), issue regulations to obtain actual costs and reasonable attorney's fees incurred by the commission in seeking compliance, penalties, or damages.

Enforcement authority and procedure: § 46-25-25.4:

(a) The commission shall have authority to seek legal or equitable relief in the federal court or in the superior court of Providence county to enforce the requirements of §§ 307(b) and (c), 402(b)(8) and other applicable sections of the Federal Water Pollution Control Act, also known as the Clean Water Act, 33 U.S.C. § 1251 et seq., and any regulations implementing those sections or authorized by this chapter and/or by chapter 12 of this title. Whenever, on the basis of any information available to the commission, the commission has reasonable grounds to believe that a person has violated any provision of §§ 46-25-25through 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 WATER QUALITY MANAGEMENT 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

5.1 Authority

The Commission may limit, reject or prohibit any direct or indirect discharge of pollutants or combination of pollutants, as defined by applicable Federal or state law or as described below, into the facilities. The Commission may, in its discretion, affix labels to those tanks which contain substances which are prohibited from being discharged to the facilities or which may not be discharged to the facilities without adequate pretreatment.

5.2 General Discharge Limitations

In addition to those limitations in paragraphs 5.3, 5.4, 5.5 and 5.6 below, no person shall discharge or cause or allow to be discharged directly or indirectly into the facilities any other substances, water or wastewater that either singly or by interaction with other substances will or is likely to:

- A. Interfere with the operation of the facilities by:
 - 1) harming either the sewerage system or wastewater treatment process;
 - 2) being otherwise incompatible with the treatment process; or
 - 3) contaminating the sludge or contributing to sludge disposal problems;
- B. Violate applicable Federal or State law, including Federal or State hazardous waste regulations, or the terms of the facility's Federal and State permits, including but not limited to, the NBC's Rhode Island Pollution Discharge Elimination System (RIPDES) Permits; or
- Endanger the environment by adversely affecting receiving waters or otherwise; or
- D. Endanger the health or welfare of persons.

5.3 Specific Discharge 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:

- A. Heat in amounts which will inhibit biological activity in the NBC's facilities resulting in Interference, but in no case heat in such quantities that the temperature at the NBC's Wastewater Treatment Plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit).
- K. Total Oil and Grease (Fats, Oils and Grease) (FOG) of mineral, animal, vegetable and other origins is not to exceed 125 mg/l.

ARTICLE 7-INSPECTION POWERS

7.1 General Powers

Inspections shall be conducted at the discretion of the NBC. Duly authorized employees and agents of the NBC, upon presenting identification and appropriate credentials, are authorized:

- A. To enter without delay and at reasonable times those premises (public or private) of any person or class of user either receiving services from the NBC or applying for services from the NBC in which a discharge source or treatment system is located or which records required to be maintained pursuant to R.I.G.L. § 46-25-25 are kept;
- B. During regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, to have access to and to copy any records, inspect any monitoring equipment or method required pursuant to R.I.G.L. § 46-25-25 and sample and/or analyze any effluents which the owner or operator of such discharge source is required to sample and/or analyze under R.I.G.L. § 46-25-25 and any rules and regulations adopted pursuant thereto; and
- C. During such on site inspections, to carry out all inspections, surveillance, and monitoring procedures necessary to determine, independent of information supplied by any person discharging into the facilities, compliance or noncompliance with NBC pretreatment requirements.

ARTICLE 8-WASTEWATER DISCHARGE PERMIT SYSTEM

8.1 Wastewater Discharge Permits Required

A. Existing Sources:

All users connected to the NBC's wastewater facilities must obtain a wastewater discharge permit. All users proposing to connect to or discharge into any part of the NBC's wastewater facilities must obtain a wastewater discharge permit before connecting to or discharging to the facilities.

B. New Sources:

New industrial and commercial sources must obtain a wastewater discharge permit before connecting to or discharging to the facilities. The industrial and commercial user must be in compliance with effluent limitations upon start-up of operation. Any required pretreatment must be installed and operational in accordance with plans and approved by the NBC. The pretreatment system shall be inspected and approved by NBC personnel before a wastewater discharge permit will be issued.

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:

- The average and maximum wastewater constituents and characteristics permitted in the process water discharges;
- Limits on rate and time of discharge or requirements for flow regulation and equalization;
- 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;
- Requirements for installation of pretreatment systems, spill and slugprevention control plans and solvent-management plans;
- Provisions for authorized NBC employees and agents to enter and inspect
 the premises, including provisions for copying records, inspecting
 monitoring equipment and sampling effluent;
- J. Compliance with Federal, state and other governmental laws, rules and regulations;
- K. Fees and costs including supplemental fees assessed because of the special nature of the user's effluent in accordance with the provisions of Article 5 and additional costs and fees based on the costs of enforcing these regulations or the permit, as in accordance with R.I.G.L. §46-25-5 (j);
- L. Signatory requirements; and
- M. Any other reasonable conditions necessary to ensure compliance with the provisions of R.I.G.L. § 46-25-1 et seq., or any state and Federal laws, rules and regulations.

8.6 General Pretreatment Requirements:

Users shall provide wastewater treatment as required to comply with these Rules and Regulations, and shall achieve compliance with all Federal, state, and NBC pretreatment standards within the time limitations specified by the Federal, State, and NBC pretreatment regulations. Any equipment or systems required to pretreat wastewater to a level acceptable to the NBC shall be provided, operated and maintained at the user's expense. The user is responsible for following all equipment instructions provided by the manufacturer. Detailed plans showing the pretreatment equipment, systems and operating procedures shall be submitted to the NBC for review and shall be acceptable to the NBC prior to construction and operation of the facilities. The design of industrial process wastewater treatment systems must be executed in accordance with the general laws of the State of Rhode Island (1956, as amended) Title 5, Chapter 8. The following paragraphs set out the minimum requirements for pretreatment and water using process plans. The NBC may require additional documentation and/or detail of plans whenever it

determines that such information is necessary to evaluate the pretreatment system or process operations.

Any review and inspection conducted by the NBC is for the sole purpose of determining compliance with the technical provisions of these Regulations. The NBC does not assume responsibility for means, methods or techniques used, or for the safety of construction work, the site, or for compliance by users with applicable laws and regulations other than this Regulation.

Review by the NBC does not constitute any form of guarantee or insurance with respect to the performance of the equipment and processes. The review of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the equipment as necessary to produce an effluent acceptable to the NBC under the provisions of this section. Any subsequent significant changes in the pretreatment equipment or method of operation shall be reported to and be acceptable to the NBC prior to the user's initiation of the changes.

A. Pretreatment Plans:

The plans of pretreatment systems and process operations must be of professional quality. The NBC may require that said plans be stamped by a Professional Engineer registered in the state of Rhode Island. The NBC may require that said plans/drawings include, but not be limited to, the following:

- All treatment tanks, their size, material of construction, and the projected daily flow(s) to each treatment tank;
- 2) All pumps, piping, valves, mixers, controls, probes, etc.;
- 3) A description of the treatment procedure for each treatment process;
- 4) Type, volume and/or quantity of ion exchange resin or media. Manufacturer's specific data for all pretreatment process components (i.e. resins, membranes, etc.) for all pretreatment components utilized.
- 5) A process schematic of the pretreatment system;
- A plant layout showing the pretreatment system, water using process tanks and location of each tank in the facility;
- 7) All sumps, pumps or effluent transfer stations;
- 8) The wastewater sampling location;
- 9) Side view or elevation drawings of all interconnected pretreatment tanks showing inlet and outlet connections; and
- 10) An original stamp and signature of a registered and licensed Rhode Island Professional Engineer.

B. Water Using Process Plans:

The NBC may require that water using process plans/drawings include, but not be limited to, the following:

1) All tanks, their contents and volume;

2) Identification and quantification of the wastewater discharge from each process tank or process operation, including:

a) continuous discharges - flowrate (gpm or gpd)

b) batch discharges - volume and frequency;

3) Where the tank discharges (if the discharge is to pretreatment, the specific pretreatment tank must be indicated);

 All floor drains, trenches and sumps, including their point of discharge and discharge destination;

The location of all sewer connections;

6) Original stamp and signature of a registered and licensed Rhode Island Professional Engineer.

All process tanks with a batch or continuous discharge must be hard piped to the point of discharge.

ARTICLE 9-WASTEWATER MONITORING AND REPORTING

9.1 Records and Monitoring

A. All users who discharge or propose to discharge wastewater directly or indirectly to the facilities shall maintain records which substantiate any information supplied in permit applications. Such records shall include, but not be limited to, pH tapes, chemical usage data, log sheets, hazardous waste manifests, water meter readings, effluent monitoring reports, self-monitoring compliance reports and any other informational requirements of these Rules and Regulations or required by a user's Wastewater Discharge Permit or any applicable state and Federal laws and regulations. These records are to be kept for a period of three (3) years unless there is pending a dispute of litigation involving the subject of these records, in which case these records are to be kept for a period of three (3) years following resolution of such litigation or dispute.

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:

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:

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.

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.

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:

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.

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;

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.

ORDER

THEREFORE, based on the above findings and violations, Rain Car Wash is hereby ORDERED to:

- Submit plans for the installation an oil and solids/grit removal system or other solids retention device to be approved by the NBC to comply with the Permit, the NBC Rule and Regulations, and the Act within twenty-one (21) days of receipt of this Order.
- 2. Install the oil and solids/grit removal system within thirty (30) days of receiving approval from the NBC.
- Submit Self-Monitoring Compliance Reports and analytical results for total oil and grease for the two outstanding samples to comply with the Permit, the Rules and Regulations, and the Act within thirty (30) days of installation of the device.
- 4. Pay an Administrative Penalty to the NBC of Four thousand dollars. (\$4,000.00) within twenty-one (21) days of receipt of this Order.

Pursuant to R.I.G.L. § 46-25-25(d) and § 42-17.1-2(21) and Article 10 of the NBC's Rules and Regulations, Rain Car Wash 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 it should not be found in violation of the NBC's Rules and Regulations and why enforcement action should not be taken against it. If a hearing is requested within the ten (10) day time period, the NBC shall provide written notice to Rain Car Wash of the date, time and place for the hearing. If Rain Car Wash fails to request a hearing within the aforementioned time frame, this Order shall automatically

become an immediate compliance order and Rain Car Wash shall be deemed to have waived the right to an adjudicatory hearing on the above cited violations.

IF USER WAIVES ITS RIGHT TO AN ADMINISTRATIVE HEARING WITHIN TEN (10) DAYS AND FAILS TO COMPLY WITH THE REQUIREMENTS LISTED IN THE ABOVE ORDER, THEN USER IS DEEMED TO BE IN DEFAULT AND THE NBC MAY IMMEDIATELY TAKE STEPS TO PREVENT ANY FURTHER FLOW FROM ENTERING THE FACILITIES. SAID STEPS MAY INCLUDE, BUT ARE NOT LIMITED TO, SEALING AND/OR PLUGGING OF THE CONNECTION AT THE POINT OF THE USER'S CONNECTION TO THE FACILITIES. THE EXECUTIVE DIRECTOR OR HIS DESIGNEE MAY FOR GOOD CAUSE SHOWN DEFER ANY OF THE COMPLIANCE DATES PRESCRIBED HEREIN. BE ADVISED THAT FAILURE TO COMPLY WITH THE TERMS OF THIS ORDER MAY SUBJECT USER TO CIVIL AND/OR CRIMINAL PENALTIES OF UP TO \$25,000 PER DAY PER VIOLATION PURSUANT TO R.I.G.L. § 46-25-25.2 AND § 46-25-25.3.

FOR THE NARRAGANSETT BAY COMMISSION

4/27/17 Date

Jennifer J. Harrington, I Chief Legal Counsel

Chloe Davis, Esq. Legal Counsel

CERTIFICATION

I hereby certify that on the 21 of April, 2017, true and accurate copies of the within ADMINISTRATIVE ORDER AND ASSESSMENT OF PENALTY were sent by certified mail, return receipt requested to the following individual:

- Kelvin Sanders, President Rain Car Wash
 150 Vandewater Street Providence, RI 02908
- Kelvin Sanders
 95 Tonawanda Avenue
 Dorchester, MA 02124

04-37-17 Date

Junel Grande Legal Assistant