STORM WATER MANAGEMENT PLAN (SWMP)

THE NARRAGANSETT BAY COMMISSION
BUCKLIN POINT WASTEWATER TREATMENT FACILITY
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Requirement to Develop a Storm Water Management Plan (SWMP) (Multi-Sector General Permit Pollutant Discharge Elimination System Storm Water Discharge Associated with Industrial Activity (MSGP), Section V.A)

The Narragansett Bay Commission (NBC) is committed to preventing spills and the release of pollutants, chemicals and oils from impacting the environment through the storm water drainage system at the Bucklin Point Wastewater Treatment Facility and Combined Sewer Overflow (CSO) Tunnel Pump Station site, collectively referred to as Bucklin Point. To that end, the NBC has developed this Storm Water Management Plan (SWMP) in accordance with Section V.A of the Multi-Sector General Permit, Rhode Island Pollutant Discharge Elimination System, Storm Water Discharge Associated with Industrial Activity (MSGP). This SWMP has been prepared in accordance with good engineering practices. The SWMP identifies potential sources of pollutants that may impact the storm water drainage system. Best Management Practices (BMP) to reduce or eliminate pollutant discharge to the storm water system have been established and are outlined in this plan.

This SWMP shall be retained on site in accordance with Section V.B of the MSGP and is available to all NBC employees via the NBC SharePoint intranet site at http://nbcintra/nbc/. In addition the SWMP can be found on the NBC website at http://narrabay.com/programs-and-initiatives/nbc-stormwater-management-plans/bucklin-point-facility/. The plan is to be reviewed at least annually. This review is done in conjunction with the inspection of the facility. Updates to the SWMP will be made as necessary after each inspection and plan review. The SWMP will also be updated accordingly when buildings/structures and/or processes are added or removed at the facility.

The SWMP has been signed by an authorized agent of the NBC as required by Section V.B.

Meg Goulet
Signature of the Director of Operations & Maintenance

11/27/2024
Date

Meg Goulet
Name

Spill Prevention and Emergency Response Team (MSGP, Section V.F.1)

The NBC has assembled a team that is responsible for the development and implementation of the Storm Water Management Plan for the Bucklin Point facility. The team consists of the following positions:

Contact Order	Position	Overall Responsibilities	Shift at Facility
1	Plant Manager	The Plant Manager has the primary responsibility for the treatment plant. As well as compliance with all RIPDES and Storm Water Permits	First shift by on call 24 hrs./day, 365 days/yr
2	Operations Manager	The Operations Manager assists the Plant Manager in the day-to-day responsibilities of the plant. In addition, this person has the primary responsibility for the treatment plant when the Plant Manager is not available.	First shift by on call 24 hrs./day, 365 days/yr
3	Maintenance Manager	The Maintenance Manager is responsible for the maintenance and housekeeping at the facility. This maintenance includes the maintenance of the structures and spill containment facilities.	First shift by on call 24 hrs./day, 365 days/yr
4	Asset Management Administrator	The Asset Management Administrator is responsible for ensuring the operations and maintenance staff have the equipment needed to perform their day-to-day activities as well as the necessary equipment for spill control and response.	First shift by on call 24 hrs./day, 365 days/yr
5	Operations Supervisor	The Operations Supervisor is responsible to ensure the proper operation of the plant and address issues including spills as they occur.	One on site on each shift

All staff listed above are familiar with all aspects of the treatment operations, the layout of the plant and surrounding NBC property and SWMP and methods to evacuate the treatment plant. In case of an oil or chemical spill or other emergency, The Plant Manager or his designee will be responsible for implementing the following actions:

1. Identifying the cause of the incident (i.e. oil spill, chemical spill, etc.)
2. Assessing the situation and the potential impacts on the health of employees and the environment
3. Isolating and protecting all storm drains that have the potential to be impacted by the spill/release using sandbags and/or absorbent materials
4. Determining the level of response requires (can the spill be handled by plant personnel or will an outside contractor be needed)
5. Notifying NBC staff as appropriate
6. Notifying regulatory agencies if required and appropriate
7. Evacuating the facility if necessary
8. Overseeing the clean up
9. Submitting all necessary reports within 15 days of the initial incident (A notification form is provided in Appendix 12)

In addition to the staff listed above, the following staff have been assigned to assist the Spill Prevention and Emergency Response team:

Director of Operations & Maintenance
Director of Environmental Science & Compliance
Pretreatment Manager
Environmental Monitoring Manager

The Executive Director and Director of Administration will be contacted as necessary.

The names and contact information for the individuals filling the aforementioned positions are provided in Appendix 5.

Storm Water Pollution Prevention Team (MSGP, Section V.F.1)

The NBC has assembled a team that is responsible for the development, implementation, maintenance and revisions of the SWMP for the Bucklin Point facility. The team consists of the following positions:

Position	Overall Responsibilities	Shift at Facility
Pretreatment Manager	The Pretreatment Manager is responsible for the development, implementation, maintenance and revisions of the SWMP. This position can conduct routine inspections.	First shift, on call 24 hrs/day, 365 days/yr
Assistant Pretreatment Manager	The Assistant Pretreatment Manager assists the Pretreatment Manager in the development, implementation, maintenance and revision of the SWMP. This position can conduct routine inspections.	First shift, on call 24 hrs/day, 365 days/yr
Environmental Monitoring Manager	The Environmental Monitoring Manager is responsible for ensuring the benchmark and impaired waters monitoring as well as the visual storm water assessments are conducted in accordance with the MSGP.	First shift, on call 24 hrs/day, 365 days/yr
Assistant Environmental Monitoring Manager	The Assistant Environmental Monitoring Manager assists the Environmental Monitoring Manager in ensuring the benchmark and impaired waters monitoring as well as the visual storm water assessments are conducted in accordance with the MSGP	First shift, on call 24 hrs/day, 365 days/yr
Environmental Monitoring Supervisors	The Environmental Monitoring Supervisors are responsible for conducting the benchmark and impaired waters monitoring events as well as the visual storm water assessment in accordance with the MSGP	First shift, on call 24 hrs/day, 365 days/yr
Senior Process Monitor	The Senior Process Monitor can conduct quarterly and annual inspections and collect samples in accordance with the MSGP	First shift
Process Monitors	The Process Monitors can conduct quarterly and annual inspections and collect samples in accordance with the MSGP	One on each shift
Director of Environmental Science & Compliance	The Director of Environmental Science & Compliance (ES&C) oversees staff responsible for the development, implementation and maintenance of the SWMP	First shift, on call 24 hrs/day, 365 days/yr
Plant Manager	The Plant Manager has the primary responsibility of the treatment plant as well as facility compliance with all RIPDES and Storm Water Permits	First shift but on call 24 hrs./day, 365 days/yr.
Operations Manager	The Operations Manager assists the Plant Manager in the day-to-day responsibility for the plant and has the primary responsibilities of the plant when the manager is not available.	First shift but on call 24 hrs./day, 365 days/yr.

The names and contact information for the individuals filling the aforementioned positions are provided in Appendix 6.

Site Description (MSGP, Sections V.F.2.(a through d), V.F.3)

The NBC Bucklin Point Campus which includes the Wastewater Treatment Facility (Bucklin Point) and the CSO Tunnel Pump Station site is located in East Providence. The plant is located at 102 Campbell Avenue and is connected to the Tunnel Pump Station site on Nassau Street. These sites are considered to be contiguous. Therefore, this plan has been developed for the campus and is referred to as Bucklin Point. Bucklin Point is the second largest wastewater treatment plant in the State of Rhode Island. It receives industrial, commercial and residential wastewater from Pawtucket, Central Falls, Cumberland, Lincoln, the northern portion of East Providence and a small portion of Smithfield. Hazardous waste is not accepted, treated at or discharged to Bucklin Point. Industrial and commercial facilities are strictly prohibited from discharging hazardous waste to Bucklin Point in the Wastewater Discharge Permits issued by the Pretreatment Section. Bucklin Point provides preliminary and primary treatment up to 116 million gallons per day (MGD) of wastewater and secondary treatment and advanced BNR of up to 46 MGD. On average 21 MGD of dry weather flow is treated at Bucklin Point and discharged to the Seekonk River (WBID RI0007019E-01) which is an impaired salt water body. Currently, the Seekonk River does not have TMDLs established for it. However, it has been determined to be impaired for Total Nitrogen, Dissolved Oxygen and Fecal Coliform.

The NBC has determined there is potential for various types of pollutants to impact the storm water drainage system at Bucklin Point. Pollutants that could spill and significantly impact the storm water drainage system include the following:

- Fuels and oils including diesel and gasoline
- Sodium Hypochlorite
- Sodium Bisulfite
- Supplemental Carbon (MicroC)
- Soda Ash
- Conventional Pollutants from wastewater treatment operations

A list detailing the descriptions of the buildings and structures at Bucklin Point is provided in Appendix 2. A further description of the chemicals stored in each building and the secondary containment for each drainage area is provided in Appendix 3.

The location of each building and structure and the storm water drainage system have been plotted on site maps of the facility. Four site maps for Bucklin Point are provided in Appendix 1. The site maps that are included are as follows:

- Bucklin Point Topographical Map
- Bucklin Point Overall Facility Site Plan
- Bucklin Point Storm Water Drainage System Plan
- Bucklin Point Facility Aerial Photo

Summary of Potential Pollutant Sources (MSGP, Section V.F.4.(a through e) and V.F.5)

The NBC stores significant quantities of sodium hypochlorite (hypo), sodium bisulfite (bisulfite), supplemental carbon (MicroC used seasonally), soda ash and diesel fuel at Bucklin Point.

Hypo is stored in two tanks with the capacity of 8,400 gallons each. The tanks are stored in a tank farm which is bermed. The secondary containment capacity of the bermed area is 13,196 gallons which is far in excess of 110% of the capacity of the largest tank stored in the area. The fill valves for the tanks are inside the bermed area. The secondary containment is equipped with a normally closed valve to allow accumulated storm water to be drained from the area. A standard operating procedure (SOP) for draining this storm water was developed and must be followed. The SOP can be found in Appendix 19. Any spills of hypo in the tank farm from either a tank rupture, leaking pipes or a problem that occurred during tank filling would be contained in the bermed area. The spilled hypo would be pumped out and contained either for reuse or off-site disposal. The storm water drainage system would not be adversely impacted from a spill in this area.

Bisulfite is stored in two 4,000-gallon tanks in the dechlorination building. The building has a secondary containment capacity of 11,511 gallons which is far in excess of 110% of the volume of the largest container in the building. Spills in the dechlorination building would be contained in the building and not impact the storm water drainage system. Any spill of bisulfite would be pumped out and contained either for reuse or off-site disposal.

There are two soda ash silos at the facility. Each silo has a capacity of 4,296 cubic feet. Since soda ash is a solid powder, any release of soda ash would stay on the ground and not impact the storm water drainage system.

There are three 1,950-gallon tanks used to store MicroC in the supplemental carbon building. The building has a secondary containment capacity of 5,000 gallons which is well in excess of 110% of the capacity of the largest container in the area. Spills in the supplemental carbon building would be pumped out and contained for either reuse or off-site disposal. MicroC is delivered by tanker truck. A flexible hose from the truck is connected to a quick connect valve on the east side of the building. A spill tray with a containment capacity of 18 gallons is placed beneath the valve during filling operations to collect any material that may spill when the hose is connected/disconnected.

Diesel fuel is used to power a generator at the facility. It is stored in an 8,000-gallon tank. This tank is double walled with a containment capacity of 8,800 gallons. The double walled tank is stored in a structure with additional containment capacity of 19,137 gallons. The tunnel pump station site will have an emergency generator which will be fueled by a 400-gallon double walled tank. There will be a leak detection system associated with this generator.

In addition to the hypo, bisulfite, MicroC and diesel listed above, Bucklin Point stores and uses other potential pollutant sources such as paints, greases and surfactants. These pollutant sources are stored primarily in the Maintenance Building but can be stored in other buildings throughout the facility. Adequate secondary containment is in place for all chemicals. Any spills of these materials would be collected and disposed of properly.

A review of the products used at Bucklin Point has determined that some of the products contain per- and polyfluororalkyl substances (PFAS). The PFAS containing products are typically used as lubricants. These products are not purchased in large quantities. They are stored in buildings and adequate secondary containment is provided for these materials. Any spills of PFAS containing materials would be collected and disposed of properly. The NBC will purchase suitable alternatives when possible.

The inventory of the chemicals stored at the facility can be found in Appendix 4. Whether a chemical/product contains PFAS compounds and if it is still used at the facility is indicated on the inventory. A detailed listing of the chemicals stored in each building is provided in Appendix 3. The secondary containment for the materials in each building is also provided in this appendix.

Spill Response Plans for chemicals onsite are provided in Appendix 10.

Minimizing Impacts from Storm Water Discharges from Major Storm Events (MSGP Section II.A.4)

The NBC has developed a Resiliency Plan for the Bucklin Point facility which is consistent with DEM guidance and its RIPDES permit requirements. The plan was developed using base flood elevations (BFE) that are provided in the 2015 FEMA Flood Insurance Rate Maps and Flood Insurance Studies with the addition of freeboard to meet minimum flood protection levels to account for sea level rise and increased extreme rainfall.

It has been determined the Bucklin Point treatment plant abuts three FEMA coastal base flood zones. The highest coastal flood zone is classified as a VE Zone, a high-risk coastal zone vulnerable to storm surges and rapid water flow from waves, and has a BFE of 14.8 ft. The design flood elevation (DFE) to protect the plant is 14.8 ft with an additional 3 ft. of freeboard, which equates to 17.8 ft. The treatment plant is surrounded by a levee with an elevation of 19.3 ft., 1.5 ft. higher than the DFE. The levee protects critical infrastructure at the facility from being adversely impacted by major storm events. The storm water systems at the plant drain by gravity through outfalls to the Seekonk River. Based on reviews of plans of the systems and inspections, it has been determined the plant is adequately protected from backflow by a series of manually

operated sluice gates. These gates are closed in advance of a major storm event. Any excess storm water remaining at the plant once the sluice gates have been closed would be pumped over the levee using portable pumps.

There are no semi-stationary structures at Bucklin Point. Therefore, there is no risk of any structures floating during major storm events. The used oil tanks are located within the levee. There should be no adverse impact on the storm water system from these tanks.

NBC vehicles are stored in locations above the DFE or within the area protected by the levee and will not be adversely impacted by major storm events.

Prediction of the Direction of Flow (MSGP, Sections V.F.2.c.2 and V.F.4.d)

The Bucklin Point facility has been inspected and the direction of flow of storm water has been determined. The Bucklin Point Storm Water Drainage System Plan depicts the seven drainage areas at the facility. The Bucklin Point Topographical Map shows how storm water would flow through the plant and subsequently to the Seekonk River. The two aforementioned maps are provided in Appendix 1.

Significant Spills (MSGP, Section V.F.2)

When a spill/release occurs, the procedures outlined in Section 2-12 of this plan must be followed. As part of the procedure, the Storm Water Pollution Prevention Team is notified. A member of the team will make the determination as to the appropriate level of documentation and notification adequate for the type and size of the spill/release. Spills/releases are required to be documented on the NBC Spill/Release Documentation Form which is provided in Appendix 12. Copies of all completed forms are kept at the facility with the SWMP and in the Pretreatment and ES&C offices.

As of the date of this plan revision there have not been any significant spills or leaks of oil or other hazardous materials in excess of reportable quantities determined under the Clean Water Act or the Comprehensive Environmental Response Compensation and Liability Act.

Non-Storm Water Discharges (MSGP, Section V.F.4)

The NBC regularly evaluates the Bucklin Point facility for the presence of non-storm water discharges. It has been determined there are no unauthorized discharges to the storm water systems. All evaluations are documented during quarterly inspections for the facility on the Quarterly Chemical/Oil Storage Area and MSGP Inspection Checklist that can be found in Appendix 15.

Summary of Monitoring Reports and Non-Storm Water Discharge Certification (MSGP, Sections III.A, IV.B, V.F.4.h, V.F.6.b.1, and VI.(A through C))

The NBC is required by Sections IV.B, V.F.4.h, V.F.6.b.1, and VI.A through C of the MSGP to conduct monitoring of storm water discharges. There are various locations throughout the plant that are monitored. These monitoring stations are located in well-lit areas on storm lines just prior to leaving the property. The monitoring stations have been identified on the Storm Water Drainage Map that can be found in Appendix 1. All monitoring is conducted during measurable storm events. Measurable storm events are defined as storm events that result in actual discharge from the facility. The monitored storm events occur at least 48 hours from the previous measurable storm event and at least 30 days from the previous monitoring event. Sampling events consist of a grab sample collected from each monitoring station within the first 30 minutes of the measurable storm event, with the exception of monitoring of snow melt discharges. In the case of snow melt monitoring, samples are collected when measurable discharges occur.

Section VI.B.1 of the MSGP requires that all facilities conduct benchmark monitoring for Total Suspended Solids (TSS) and Oil & Grease (O&G). Facilities must meet the following benchmark concentrations:

Parameter	Concentration
O&G	15 mg/L
TSS	100 mg/L

The Bucklin Point facility is in Industrial Sector T – Treatment Works. This sector does not have any additional benchmark parameters.

Benchmark monitoring is conducted at each monitoring location four times per year. Two monitoring events are conducted between January 1st and June 30th and the remaining two monitoring events are conducted between July 1st and December 31st. All samples are collected during measurable storms with at least 30 days between monitoring events. If the average of the analytical results for the first four monitoring events for each location are below the benchmark concentrations, the benchmark monitoring requirement will be satisfied for the permit term as stated in Section VI.B.1.c for this location. If the average of the results exceeds the benchmark concentrations, corrective action will be taken in accordance with Section III.A of the MSGP.

The Seekonk River has been classified as impaired for total nitrogen, dissolved oxygen, and fecal coliform. As stated in Section VI.B.3.a.i of the MSGP, facilities discharging to an impaired water body must monitor storm water discharges from the facility for the parameters causing the impairment on an annual basis. Based upon the Seekonk River water quality impairments, the following parameters have been identified by the NBC for monitoring:

Total Nitrogen
Fecal Coliform

The impaired waters monitoring will be conducted four times per year. Two monitoring events are conducted between January 1st and June 30th and the remaining two monitoring events are conducted between July 1st and December 31st. All samples are collected during measurable storms with at least 30 days between monitoring events. If a pollutant is not detected and not expected to be present at any of the monitoring locations after two consecutive monitoring periods, the DEM will be notified and sampling at that location will be discontinued in accordance with Section VI.B.3.c. If a pollutant for which the Seekonk River is impaired is detected at any of the monitoring locations, monitoring will continue at that location for that pollutant for the duration of the permit or until the pollutant is not detected for two consecutive monitoring periods.

The samples collected to satisfy benchmark and impaired waters monitoring requirements are collected during the same measurable storm events. The samples are analyzed separately using standard analytical methods outlined in 40CFR136.

The analytical results for both benchmark and impaired water body monitoring and a completed Discharge Monitoring Report (DMR) signed by the appropriate staff is submitted to the DEM and kept on file. The DMRs can be found in Appendix 18. If a review of the analytical data indicates that storm water discharging from the site is causing an exceedance of a water quality or benchmark parameter, the NBC will conduct follow-up monitoring within 30 calendar days or during the next qualifying storm event after implementing corrective measures. An Exceedance Report detailing the cause of the exceedance, and the corrective measures will be submitted to the DEM within 30 days of receiving the certified analytical results.

In accordance with Section IV.B the NBC conducts visual assessments of storm water discharges from each monitoring station. Four visual assessments are to be conducted per year, two between January 1st and June 30th and two between July 1st and December 31st. The monitoring is conducted during day light hours on measurable storm events. At least one of the quarterly monitoring events may take place while discharges of snow melt are occurring. All samples are collected in clean, clear containers within the first 30 minutes of the measurable storm event. The grab samples are to be assessed for the following parameters:

Color	Oil Sheen
Clarity	Settled Solids
Floating Solids	Suspended Solids
Foam	Other Obvious Indicators of Storm Water Pollution
Odor	

Environmental Monitoring (EM) staff conduct the quarterly monitoring. A Storm Water Visual Assessment Report Form is completed for each monitoring event. The Plant Manager reviews and signs the completed form. Copies of the completed form are filed with the Plant Manager and in the Pretreatment and ES&C offices. The NBC Storm Water Visual Assessment Report Form is provided in Appendix 16. The completed reports serve as certification that non-storm water discharges have not occurred.

A review of the completed Storm Water Visual Assessment forms from 2006 through the present indicated the storm water discharged from Bucklin Point has not adversely impacted the Seekonk River. A summary of the data from the visual assessments can be found in Appendix 17.

Inspections, Record Keeping and Reporting Procedures and Preventative Maintenance (MSGP, Sections IV.(A and B), V.F.6.a and VII(A through E))

In order to ensure compliance with 40CFR112 and the MSGP, the NBC developed an extensive inspection program. Inspections of all areas of the facility where chemicals, oils, and waste are stored are conducted on a routine basis. In addition, storm water monitoring is routinely performed at the facility to ensure that discharges do not adversely impact the receiving waters. All inspections are performed by NBC staff that are knowledgeable and have been trained to assess the conditions and requirements outlined in all applicable regulations and permits. The following details the frequency of NBC inspections and monitoring activities.

Inspection	Frequency	Justification
Used Oil Storage	Weekly	RIDEM Used Oil Inspection Requirement
Oil Storage	Monthly	EPA SPCC Guidance Document for Regional Inspectors
Site Inspection of Chemical/Oil Storage Areas	Quarterly	MSGP
Comprehensive Site Inspection	Annually	MSGP
North and South Pond Inspections	Annually and after rain events greater than 2.70”	MSGP
Visual Storm Water Monitoring	Four times per year. Twice between January 1st and June 30th and twice between July 1st and December 31st.	MSGP
Benchmark & Impaired Water Body Monitoring	Four times per year. Twice between January 1st and June 30th and twice between July 1st and December 31st.	MSGP
Discharge of Storm Water Collected in Containment Areas	As Needed	Storm Events

The purpose of these inspections is to ensure that all spill control measures are in place and adequate. Needed repairs and upgrades are noted at the time of the inspection. Work orders for any repairs will be generated. Follow-up inspections of the area are conducted to verify that the required repairs have been completed. Inspections are documented on corresponding forms. These forms are provided in Appendices 14, 15,16, 18 and 19. Completed forms and work orders are filed at the facility with the SWMP as well as in the Pretreatment and ES&C offices.

Bulk oil storage containers and associated piping are visually inspected by NBC personnel on a routine basis using an inspection checklist developed in accordance with 40CFR112 Appendix F – 1.8.1.1. The SPCC Tank Inspection Checklist is provided in Appendix 15. Due to the configuration of the bulk diesel tank (i.e. elevated shop built tanks with either secondary containment or double walled construction) integrity tests will be performed only on an as needed basis such as when a when a visual inspection noted a potential tank integrity problem. If and when integrity testing is needed it will be performed by a certified inspector. If a tank and/or piping is required to be replaced, it will be done following the specifications detailed in 40CFR112.8(c).

The annual comprehensive site inspection is a requirement of Section IV.A of the MSGP. The purpose of this inspection is to ensure that the SWMP is accurate, and the NBC is in compliance with the MSGP. It is conducted by Pretreatment staff that are members of the Storm Water Pollution Prevention Team required by Section V.F.1 of the MSGP. This annual inspection incorporates the inspection of all structures and materials on site that can impact the storm water drainage system. Structures are inspected to ensure that they are in good condition. All areas of the facility are inspected to ensure that spills, releases or leaks have not occurred since the last inspection. If any deficiencies or updates are needed, the plan would be revised accordingly, and the appropriate personnel would be notified. Bucklin Point Operations staff generate service requests to make all required repairs/upgrades. Documentation of the work order and completed work is kept at the facility as well as in the Pretreatment and ES&C offices. Follow-up inspections are conducted to verify the repairs/upgrades have been completed. Pretreatment staff provide a detailed inspection report along with the completed NBC Storage Area Inspection Checklist which is provided in Appendix 15. This checklist is also used to document the quarterly comprehensive inspections. Completed checklists and work orders are kept on file at the facility as well as in the Pretreatment and ES&C offices.

The NBC is required to conduct visual monitoring of storm water discharges as stated in Section IV.B of the MSGP. There are various locations throughout the plant that are monitored. These monitoring stations are located on storm lines just prior to leaving the property. The monitoring is conducted four times per year, twice between January 1st and June 30th and twice between July 1st and December 31st. Grab samples from each station must be collected within the first 30 minutes of a storm event discharge where practicable. Storm events that are to be monitored must result in an actual discharge of storm water from the site. Storm event monitoring must occur at least 48 hours from a previously measurable storm event and at least 30 days from the previous monitoring event. The grab samples are to be monitored for the following parameters:

Color	Oil Sheen
Clarity	Settled Solids
Floating Solids	Suspended Solids
Foam	Other Obvious Indicators of Storm Water Pollution
Odor	

EM staff conduct the visual monitoring. A Storm Water Visual Assessment Report Form is completed for each monitoring event. The Plant Manager reviews and signs the completed form. Copies of the completed form are filed with the Plant Manager as well as in the Pretreatment and ES&C offices. The NBC Storm Water Visual Assessment Report Form is provided in Appendix 16.

The annual and quarterly inspection reports and the Storm Water Visual Assessment reports serve as certification that non-storm water discharges have not occurred. These reports are uploaded to a shared folder where they are available for review by all staff.

Best Management Practices (BMP) (MSGP, Sections II.A.2.a and V.6.a)

The NBC recognizes that the Seekonk River is impaired for fecal coliform and nitrogen. Currently there are no TMDLs in place for these parameters for the Seekonk River. The NBC has developed and implemented the good housekeeping and control measures outlined below to ensure that storm water discharges from the Bucklin Point facility do not adversely contribute bacteria and nitrogen loading to the river. Implementation of these measures allows the Bucklin Point facility to fully comply with the requirements of the MSGP and ensure that storm water discharged from the Bucklin Point facility does not adversely contribute nitrogen or bacteria to the Seekonk River. Periodic monitoring data of the storm water system has demonstrated that storm water discharged from the Bucklin Point facility does not contribute to nitrogen or bacteria impairments of the Seekonk River. If future monitoring data should show elevated levels of bacteria or nitrogen, the causes of the elevation will be promptly investigated and corrected, the frequency of control measures will be increased if necessary and the implementation of "Enhanced Good Housekeeping Measures" will be evaluated.

Good Housekeeping: The NBC takes pride in keeping the facility clean. Areas where chemicals are stored are kept neat and clean. When spills occur in these areas, they are immediately cleaned up and the material is disposed of properly. This is done to ensure there is no further impact on the surrounding environment as well as for safety concerns. Garbage at the facility is contained in dumpsters that are covered. The doors and covers on the dumpster are kept closed to prevent garbage from escaping the containers. The facility is routinely inspected and any trash that is found is placed in trash receptacles for proper disposal. The facility is surrounded by a security fence which keeps unauthorized people from entering. This minimizes the impact of trash from off the site.

Street Sweeping: Routine street sweeping is a BMP that minimizes the discharge of pollutants to the storm water drainage system. Bucklin Point staff inspects the facility on a quarterly basis to determine when street sweeping activities should be performed on non-porous areas of the facility. At a minimum, street sweeping activities are conducted on a quarterly basis in the areas where storm water does not discharge to the North Pond or South Pond. If monitoring data shows elevates levels of bacteria or nitrogen or there are other activities such as construction taking place at the facility, street sweeping frequency is increased. The inspections and street sweeping activities are tracked and recorded in an electronic service maintenance system. Sand/dirt that is collected may be used for fill for minor construction projects or properly disposed.

Catch Basin Cleaning: Routine catch basin cleaning will minimize the discharge of pollutants to the Seekonk River. Bucklin Point Maintenance staff inspect the catch basins on the property on a quarterly basis and Interceptor Maintenance (IM) staff clean them out as needed. At minimum, the catch basins are cleaned out by IM staff on a biannual basis. The inspections and cleaning activities are tracked and recorded electronically in a service maintenance tracking system.

Vehicle and Marine Vessel Washing: Vehicle washing activities at the facility are conducted inside the Maintenance Building or in areas where catch basins discharge to the headworks of the plant. The wash water generated from these operations does not impact the storm water system. Marine vessels are not washed at Bucklin Point.

Pavement Washing: Pavement is not routinely washed at Bucklin Point. However, when pavement needs to be washed, the resultant wastewater is either directed to drains that discharge back to the plant or is contained and collected for disposal or treatment. If a spill occurs at the facility and the pavement needs to be decontaminated, the decontamination wastewater is collected and disposed. In both cases, pavement washing and decontamination, the storm water system and Seekonk River are protected by isolating any catch basins in the area with protective mats or temporary berms.


Used Oil Storage Containment Area

Minimizing Exposure: The NBC stores all chemicals inside buildings where practicable. Where chemicals and used oils are not stored inside of a building, they are stored inside storm resistant enclosures. These measures prevent exposure to rain, snow, snow melt and runoff and the impact on the storm water drainage system. There are some locations at the facility where chemicals are exposed to the weather. These chemicals are stored in weather resistant tanks and containers. The tanks and containers are either in permanent secondary containment or on spill pallets. Although the tanks and containers are exposed to rain and snow, there is no adverse impact on the storm water drainage system. Storm water captured in the secondary containment is inspected prior to being released. If it is determined that the storm water is contaminated it would be pumped out and disposed of properly.

Vehicle Tracking of Materials On-Site: The materials that are processed on-site are typically transported throughout the facility via underground piping. There are some operations where materials are transported on the property via trucks. These operations include chemical/oil deliveries, grit disposal, pump-outs of scum wells, and solids handling. All vehicles are inspected to ensure they are not leaking materials throughout the plant. If a leak is detected, Operations staff handles the clean-up and ensures the material does not enter the storm water system. Standard Operating Procedures (SOP) have been developed for bulk chemical and oil deliveries. The SOPs can be found in Appendix 9.

Sludge Handling: The sludge processing operation is conducted by a contractor. The sludge is transported to the Solids Handling Building by underground piping. It is dewatered and shipped off site for disposal. The contractor has developed a SOP to ensure that sludge is not tracked through the facility. This SOP can be found in Appendix 11.

Preventative Maintenance: As a part of the BMPs the Storm Water Pollution Prevention Team has established an extensive preventative maintenance program. This program includes performing regularly scheduled inspections to determine if storm water management structures such as berms, secondary containment structures and storage bins are in need of repair or upgrade. If repairs or upgrades are warranted, NBC Maintenance staff are notified and work orders are generated. Once the work has been completed the area is then subsequently reinspected to verify the repairs or upgrades have been completed.

Drainage Ponds: There are two drainage ponds at the Bucklin Point facility, the North and South Ponds. The drainage areas to the North and South Ponds are 14.7 and 16.0 acres respectively. The North Pond is a wet vegetated treatment system (WVTS). The piped storm water flow to the North Pond is pretreated through sediment forebays. A 15-inch high weir plate has been installed on the outlet control structure of the pond to provide 0.386 ac-ft of storage. Plants within the wet portion of the pond are tolerant of standing water.

The South Pond is maintained as a modified infiltration basin. The piped storm water flows into the South Pond passes over rip rap at the discharge for outlet protection and to trap sediments. Flow continues through a vegetated bed designed to tolerate both wet and dry conditions. The outlet gate from the South Pond to the Seekonk River is kept in a closed position. Storm water is not discharged from this pond under normal conditions. In the situation of an anticipated sustained wet weather event, if the depth of the stored water in the pond is three feet or higher (to the top of the first tier of gabion basket), the outlet gate will be opened and the pond drained at low tide to provide storage capacity for the predicted storm water volume and to prevent flooding on the site.

The WVTS (North Pond) and modified infiltration basin (South Pond) are inspected on an annual basis and after storm events greater than or equal to a 1 year, 24-hour rainfall event (2.70 in.) The inspections assess the condition of the following areas:

- The pond embankments for erosion and gullying (North and South ponds)
- The vegetation in the ponds (North and South ponds)
- Sediment accumulation in the rip rap and pond bottom (South Pond)
- Sediment accumulation in the sediment forebays (North Pond)
- The weir plate on the outlet control structure (North Pond)
- The gabion basket sediment forebay and rip rap pad (North Pond)

Deficient areas are repaired in a timely manner to ensure the proper functioning of the WVTS and modified infiltration basin.

The following preventative maintenance activities will be performed on the two ponds:

- Sediment shall be removed from the sediment forebays in the North Pond every five years or after 50% of the total forebay capacity has been lost, whichever occurs first.
- Sediment shall be removed from the rip rap every five years.
- Sediment shall be removed from the pond bottom when 10% of the volume of the pond is lost (7 in. of sediment in the South Pond and 25 in. of sediment in the North Pond)
- Sediment removed from the ponds and forebays will be disposed of properly.

Procedures for Responding to Emergencies and Reporting Requirements (MSGP, Sections IIA.2.d and V.F.6.a)

NBC staff is trained to implement common sense practices to prevent spills/releases of oils and chemicals to the environment. However, if a spill/release occurs, the NBC has developed policies and procedures to be used by all staff in the event of a spill of oils, chemicals, or hazardous materials. "NBC Hazardous Material Spill Response and Notification Policy", policy G-S-3 has been distributed to all NBC employees via the NBC Policy Manual. Staff working in the facility is trained annually regarding this procedure. The policy is as follows.

In the event of a spill of an oil, chemical, or hazardous material NBC responders will follow section/facility specific spill control/response procedures which at a minimum include the actions listed below:

1. Identify the material that was spilled/released.
2. Assess the situation for human health and environmental impacts.
3. Call 911 for injured personnel if necessary.
4. Evacuate the impacted area if necessary.
5. Isolate and protect all storm drains that have the potential to be impacted by the spill/release using sandbags and/or absorbent materials.
6. Immediately notify a supervisor.
7. The supervisor will immediately notify the Plant Manager /Operations Manager and Pretreatment Manager.
8. Keep unauthorized/unaffected staff out of the area.
9. Contain the spill/release if possible.
10. Stop the source of the spill/release (i.e. shut valves, upright barrels) if possible.
11. A completed Spill/Release Report must be filed with the SWMP and in the Pretreatment and ES&C offices.

Based on the type and quantity of material released, Operations staff with the assistance of Pretreatment staff will determine the written reports that must be filed and make all appropriate local, state, and federal notifications and decide on the appropriate actions for the collection, management, and disposal of the spill debris.

Any release of hazardous material that resulted in the actual or potential human health and/or environmental harm must be immediately reported to the Rhode Island Department of Environmental Management (RIDEM). Releases of hazardous material equal to or exceeding established Reportable Quantities (RQ) must be reported to the following agencies:

Agency	Telephone Number
RIDEM	401.222.1360 / 401.222.3070 (after hours)
National Response Center	1.800.424.8802
State Fire Marshal	401.462.4200 / 401.222.2331 (after hours)

A listing of RQs for hazardous materials used at the facility is provided in Appendix 7. In addition to making the notifications listed above, the NBC supervisor on the scene must complete the NBC Spill/Release Documentation Form which is provided in Appendix 12. Copies of the completed form must be kept at the facility and in the Pretreatment and ES&C offices.

Emergency Contingency Procedures

In the event of an emergency, the Plant Manager, Operations Manager and/or the Operations Supervisor must be notified immediately. The manager/supervisor that was notified is to assess the situation and take the appropriate actions. If the emergency requires outside agency notification, the Pretreatment Manager and/or the Director of Operations & Maintenance will be contacted for assistance. The Pretreatment Manger will be contacted for assistance with response procedures and mitigation if possible. The Executive Director will be informed of the emergency and any outside intervention that may be required.

The highest priority will always be employee safety. At no time will an employee be put at risk. If the size or type of emergency exceeds the capabilities of NBC staff, the fire department, an emergency response team or Hazmat team will be called in to handle the emergency.

Fires

There is a potential risk of fires occurring at the Bucklin Point plant. In the event of a fire the following procedure is to be followed:

1. With an ABC fire extinguisher, attempt to extinguish the fire if possible.
2. If the fire is extinguished, report the incident to the Plant Manager, Operations Manager, and/or Operations Supervisor.
3. If unable to extinguish the fire:
    - Pull fire alarm - this will contact the local Fire Department.
    - All personnel will leave the building(s) and meet at the designated assembly area.
    - The Plant Manager, Operations Manager, and/or Operations Supervisor will account for all staff present for that day and will notify the NBC main office of the incident and that the fire department has been called.
    - The Plant Manager, Operations Manager, and/or Operations Supervisor will assign a Bucklin Point representative to meet the fire department at the plant main gate on Campbell Avenue.
    - The Manager/Supervisor will notify the Process Monitor to open the employee entrance gate and leave it open for the Fire Department.
    - NBC staff will direct the Fire Department to the location of the fire.
4. The responding manager/supervisor will contact the Pretreatment Manager and/or the Director of Operations & Maintenance for guidance on the appropriate agencies to contact, and submittal of the necessary documents regarding the event. The Executive Director will be contacted and updated on the event.

Explosions

There is a potential risk of a chemical explosion occurring at the plant. This determination is based on the Safety Data Sheet information regarding flammability of some materials stored Bucklin Point, and the safety concerns regarding the handling of compressed gases. In the event of an explosion the procedure below is to be followed:

1. Pull fire alarm – this will contact the local Fire Department.
2. Personnel will leave the building(s) and meet at the designated area for emergencies.
3. The Plant Manager, Operations Manager, and/or Operations Supervisor will account for all staff present for that day and will notify the NBC main office of the incident and that the fire department has been called.
4. The Plant Manager, Operations Manager, and/or Operations Supervisor will assign a Bucklin Point representative to meet the fire department at the plant main gate on Campbell Avenue.
5. The Plant Manager, Operations Manager, and/or Operations Supervisor will contact the Pretreatment Manager and/or the Director of Operations & Maintenance for guidance on the appropriate agencies to contact, and the submittal of the necessary documents regarding the event. The Executive Director will be contacted and updated on the event.

Hazardous Materials/Chemical Release

There is a potential risk of chemical release occurring at the plant. This determination is based on the usage of hazardous materials and SDS information regarding chemical hazards of materials stored at the plant. When a spill/release is discovered the procedures for containing, controlling and responding to spills/releases detailed in this plan must be followed:

1. Identify the material that was spilled/released.
2. Assess the situation for human health and environmental impacts.
3. Call 911 for injured personnel if necessary.
4. Evacuate the impacted area if necessary.
5. Isolate and protect all storm drains that have the potential to be impacted by the spill/release using sandbags and/or absorbent materials.
6. Immediately notify a supervisor.
7. The supervisor will immediately notify the Plant Manager /Operations Manager and the Pretreatment Manager.
8. Keep unauthorized/unaffected staff out of the area.
9. Contain the spill/release.
10. Stop the source of the spill/release (i.e. shut valves, upright barrels) if possible.
11. Complete a Spill/Release Report which must be filed with the SWMP and in the Pretreatment and ES&C offices.

Spill Response Plans for chemicals and oils are provided in Appendix 10.

Spill Clean-Up

If the spill/release can be safely cleaned up by NBC staff, personal protective equipment (PPE) supplied by the NBC must be utilized. PPE includes but is not limited to the following:

Splash Goggles
Tyvek Suits
Long Sleeve Shirts or Coats
Nitrile, Leather and Rubber Gloves
Hard Hats

The NBC has extensive spill clean-up equipment stored in the Emergency Spill Control Trailer. This equipment trailer can be promptly transported to the site of the spill and be used to contain and clean up the spill if appropriate. The contents of this trailer are listed below:

Plugs for drain lines
Manhole Cover Hook
Oil Absorbent Pads
Absorbent Pigs
Speedy Dry
Sand Bags
Sump Pump
Hose
Overpack Drum
Portable Air Compressor
Extension Cords
Fire Extinguisher
Rope
Light Tree
Traffic Cones
Safety Goggles
Gloves
Squeegee
Shovels

The Pretreatment Section also has spill/release mitigation equipment and PPE on site. This equipment includes:

Absorbent Pads
Flexible Containment Berms
Absorbent Sausage Booms
Rubber Boots
Tyvek Suits
Air Monitoring Equipment
Traffic Cones
Safety Goggles
Gloves
Waders
Hard Hats

In the event a spill/release discharges to the Seekonk River, the Pretreatment Section has curtain booms to deploy around the plant effluent outfall or the outfalls of the two diversion structures or the other storm water outfalls.

The Plant Manager, Operations Manager, and/or the Pretreatment Manager will determine whether or not the spilled material is hazardous and if an outside contractor is needed. NBC staff should never attempt to clean up a spill if any of the following conditions exist:

- The type of material is unknown
- Proper PPE is unavailable
- The surrounding environment poses a threat or hazard
- The spill occurs near a known ignition source
- The situation involves an uncontrolled release of compressed gas
- Communication with other Bucklin Point employees is not available

A list of Emergency Response Service Contractors is provided in Appendix 8.

Management of Runoff and Run-On (MSGP, Sections II.A.2.f and V.F.5)

The NBC has assessed the current storm water management practices utilized at Bucklin Point. Based on this assessment and the materials stored at the facility, the current practices are reasonable and appropriate. The practices have been implemented and are being maintained. There are two drainage ponds on the site, the North Pond which is a shallow wet vegetated treatment system (WVTS) and the South Pond which is a modified infiltration basin. These ponds are used to control runoff and provide treatment of storm water from the facility. The ponds are indicated on the Bucklin Point Site Maps which is provided in Appendix 1.

The area surrounding the Bucklin Point facility has been assessed and it has been determined it is primarily residential. Run-on from these properties does not adversely impact the facility storm water system.

Sediment and Erosion Prevention (MSGP, Sections II.A.2.e and V.F.6.a)

The Bucklin Point facility has both paved and landscaped areas. There is a wet vegetated treatment system at the North Pond and a modified infiltration basin at the South Pond. These ponds control and treat storm water runoff from the site and retain sediment. In addition, there are two permanently closed landfills at the plant. The landscaped areas are maintained by Bucklin Point staff. In order to prevent erosion, vegetation has been planted and maintained at the site.

Staff Training (MSGP, Section II.A.2.i)

The NBC is committed to ensuring compliance with all state, federal and local requirements as well as the safety of its employees. Employees receive extensive training upon beginning employment with the NBC and annually thereafter. The Safety Compliance Coordinator tracks the training of all employees. Employees are required to sign in when taking any training. This documentation is filed with the SWMP as well as in the Pretreatment and ES&C offices. Staff working at the facility receive the following training classes at the frequency below:

Training	Frequency
• Spill Prevention, Control & Countermeasures Plan	Annually
• Storm Water MSGP Requirements	Annually
• Spill Prevention and Response	Annually
• Environmental, Health and Safety Awareness	Annually
• Emergency Action Plans	Annually
• Permit Required Confined Space	Annually
• Personal Protective Equipment	Annually
• Hazardous Waste Management	Annually
• Lock Out/Tag Out	Annually
• Fire Prevention Plans / Fire Extinguisher	Annually

Each of the aforementioned trainings is very thorough. All of the requirements of the applicable standards and plan are reviewed annually during the trainings. These trainings generally are scheduled throughout the year and offered on all three shifts so that all staff members receive the required training.

Specialized training is also provided to various NBC staff working for and at the facility. These specialized training classes provided to some staff include the following:

- Hazardous Waste Operations (HAZWOPER), 40-hr initial/8-hr annual refresher
- Fork Lift Training
- Spill Tracking
- Boom Deployment
- Infectious Materials Exposure Control (IMEC) Program – Blood Borne Pathogens

Requirements for Salt Storage Piles (MSGP, Sections II.A.2.g and V.F.4.g)

The NBC has a salt pile at Bucklin Point. The salt pile is covered and not exposed to the weather. Salt storage at the facility is appropriate to prevent material from adversely impacting the storm water drainage system.

Requirements for SARA Title III Facilities (MSGP, Section III.B.3)

The NBC complies with all appropriate conditions under Emergency Planning and Community Right-to-Know Act (EPCRA) and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requirements.

Requirements with Other Plans (MSGP, Section V.F.8)

The NBC has ensured that this SWMP is consistent with all other requirements for Spill Prevention Control and Countermeasure Plans.

Endangered Species (MSGP, Section V.F.7)

The NBC has reviewed the DEM Environmental Resource Map. According to the map the Bucklin Point facility is not located in an area nor has a discharge to a surface water of the State of Rhode Island that could potentially affect a listed or proposed to be listed endangered or threatened species or its critical habitat.

Appendix 1

Facility Site Maps

The information in this Appendix has been deemed restricted in accordance with Section V.H of the MSGP

From Appendix A of the MSGP:

“Restricted Information – for the purposes of this permit, information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, Executive Orders, or regulations. Such information includes but is not limited to: classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information.”

Appendix 2

Buildings & Structures Descriptions

The information in this Appendix has been deemed restricted in accordance with Section V.H of the MSGP

From Appendix A of the MSGP:

"Restricted Information – for the purposes of this permit, information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, Executive Orders, or regulations. Such information includes but is not limited to: classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information."

Appendix 3

Drainage Areas & Secondary Containment

The information in this Appendix has been deemed restricted in accordance with Section V.H of the MSGP

From Appendix A of the MSGP:

“Restricted Information – for the purposes of this permit, information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, Executive Orders, or regulations. Such information includes but is not limited to: classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information.”

Appendix 4

Chemical Inventory

The information in this Appendix has been deemed restricted in accordance with Section V.H of the MSGP

From Appendix A of the MSGP:

“Restricted Information – for the purposes of this permit, information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, Executive Orders, or regulations. Such information includes but is not limited to: classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information.”

Appendix 5

Spill Prevention and Emergency Response Team

The information in this Appendix has been deemed restricted in accordance with Section V.H of the MSGP

From Appendix A of the MSGP:

"Restricted Information – for the purposes of this permit, information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, Executive Orders, or regulations. Such information includes but is not limited to: classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information."

Appendix 6

Storm Water Pollution Prevention Team

The information in this Appendix has been deemed restricted in accordance with Section V.H of the MSGP

From Appendix A of the MSGP:

“Restricted Information – for the purposes of this permit, information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, Executive Orders, or regulations. Such information includes but is not limited to: classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information.”

Appendix 7

Reportable Quantities

Reportable Quantities for Chemicals on site at Bucklin Point

Material	CAS Number	RQ (lbs)	RQ (Gal.)	Reason for Listing
Diesel Fuel	68476-34-6	100	14	RCRA - Ignitable
Gasoline	8006-61-9	100	16	RCRA - Ignitable
Sodium Hypochlorite	7681-52-9 / 10022-70-5	100	10	CERCLA RQ
Sodium Bisulfite	7631-90-5	5,000	450	CERCLA RQ
Hydrochloric Acid	7647-01-0	5,000	375	CERCLA RQ
Nitric Acid	7697-37-2	1,000	75	CERCLA RQ
Kerosene	8008-20-6	100	14	RCRA - Ignitable

Any release of hazardous material that resulted in the actual or potential human health and/or environmental harm must be immediately reported to the Rhode Island Department of Environmental Management (RIDEM). Releases of hazardous material equal to or exceeding established Reportable Quantities (RQ) must be reported to the following agencies:

Agency	Telephone Number
RIDEM	401.222.1360 / 401.222.3070 (after hours)
National Response Center	1.800.424.8802
State Fire Marshal	401.462.4200 / 401.222.2331 (after hours)

Appendix 8

List of Emergency Response Contractors

List of Emergency Response Contractor

Clean Harbors Environmental Services, Inc
8 Dexter Road
East Providence, RI 02914
401.431.1874
401.431.2154 (fax)

Western Oil, Inc.
One Duchess Way
Lincoln, RI 02865
401.727.8600
401.727.7667 (fax)

Inland Water Pipeline Services
275 Scituate Avenue
Johnston, RI 02919
401.943.5302
877.943.5300 (toll free)
401.943.5714 (fax)

Appendix 9

Standard Operating Procedure Ordering & Receiving Chemicals

STANDARD OPERATING PROCEDURE
ORDERING AND RECEIVING CHEMICALS & OILS

When ordering and receiving shipments of bulk chemicals the following procedure must be followed in order to ensure all products are transferred from the delivery vehicle to the appropriate storage tanks in a safe and proper manner.

1. Contact the chemical supplier to place the order.
2. Schedule a delivery date and approximate time. *
3. At the time of the delivery, a Bucklin Point staff member assigned to monitor the delivery must have a form of emergency communication and make arrangements for access to adequate spill control equipment.
4. When the vendor arrives at the facility, a Bucklin Point employee must meet the vendor to accompany the vendor to the off-loading location.
5. Assure the vehicle is not leaking before granting access to the facility.
6. Escort the vendor to the appropriate off-loading area(s).
7. Verify the vendor secures the vehicle and shipment from accidental/unanticipated movement (i.e. chock the wheels of the truck)
8. Prior to unloading the shipment, the trained Bucklin Point staff member and the vendor must complete the attached Chemical Delivery form in full. The form must be signed by both parties.
9. The Bucklin Point staff member must remain with the vendor to observe off-loading operations to ensure the delivery is made using safe practices and appropriate precautions so as not to cause leakage or spills.
10. Inspect the area to ensure there has not been an accidental release.
11. Sign all required paperwork.
12. Escort the vendor of NBC property via the main gate.
13. Submitted the completed Chemical Delivery Form to the Assistant Superintendent.
14. If a spill occurs, follow all standard operating procedures outlined in the Spill Prevention Control and Countermeasures Plan for the facility.

*Deliveries of soda ash should occur during dry weather

STANDARD OPERATING PROCEDURE
ORDERING AND RECEIVING
CHEMICALS AND/OR OIL PRODUCTS IN DRUMS

When ordering and receiving shipments of fuel oils or other oil products the following procedure must be followed in order to ensure all products are transferred from the delivery vehicle to the appropriate storage tanks in a safe and proper manner.

1. Contact the chemical/oil product supplier to place the order.
2. Schedule a delivery date and approximate time.
3. At the time of the delivery, a Bucklin Point staff member assigned to monitor the delivery must have a form of emergency communication and make arrangements for access to adequate spill control equipment.
4. When the vendor arrives at the facility, a Bucklin Point employee must meet the vendor to accompany the vendor to the off-loading location.
5. Assure the shipment is not leaking before granting access to the facility.
6. Escort the vendor to the appropriate off-loading area (s).
7. Verify the vendor secures the vehicle and shipment from accidental/unanticipated movement (i.e. chock the wheels of the truck)
8. Verify the delivery is the proper type of product(s).
9. Prior to unloading the shipment, the trained Bucklin Point staff member and the vendor must complete the attached Chemical Delivery form in full. The form must be signed by both parties.
10. The Bucklin Point staff member must remain with the vendor to observe off-loading operations to ensure the delivery is made using safe practices and appropriate precautions so as not to cause leakage or spills.
11. Assure the amount and type of product delivered match the delivery/shipping papers. If additional product remains on the delivery vehicle, verify that all products are safely secured and no leakage is occurring before the vendor mover the vehicle.
12. Inspect the area to ensure there has not been an accidental release.
13. Sign all required paperwork.
14. Escort the vendor of NBC property via the main gate.
15. Submitted the completed Chemical Delivery Form to the Assistant Superintendent.
16. If a spill occurs, follow all standard operating procedures outlined in the Spill Prevention Control and Countermeasures Plan for the facility.

STANDARD OPERATING PROCEDURE
ORDERING AND RECEIVING
CHEMICALS AND/OR OIL PRODUCTS IN DRUMS

When ordering and receiving shipments of fuel oils or other oil products the following procedure must be followed in order to ensure all products are transferred from the delivery vehicle to the appropriate storage tanks in a safe and proper manner.

1. Contact the chemical/oil product supplier to place the order.
2. Schedule a delivery date and approximate time.
3. At the time of the delivery, a Bucklin Point staff member assigned to monitor the delivery must have a form of emergency communication and make arrangements for access to adequate spill control equipment.
4. When the vendor arrives at the facility, a Bucklin Point employee must meet the vendor to accompany the vendor to the off-loading location.
5. Assure the shipment is not leaking before granting access to the facility.
6. Escort the vendor to the appropriate off-loading area (s).
7. Verify the vendor secures the vehicle and shipment from accidental/unanticipated movement (i.e. chock the wheels of the truck)
8. Verify the delivery is the proper type of product(s).
9. Prior to unloading the shipment, the trained Bucklin Point staff member and the vendor must complete the attached Chemical Delivery form in full. The form must be signed by both parties.
10. The Bucklin Point staff member must remain with the vendor to observe off-loading operations to ensure the delivery is made using safe practices and appropriate precautions so as not to cause leakage or spills.
11. Assure the amount and type of product delivered match the delivery/shipping papers. If additional product remains on the delivery vehicle, verify that all products are safely secured and no leakage is occurring before the vendor mover the vehicle.
12. Inspect the area to ensure there has not been an accidental release.
13. Sign all required paperwork.
14. Escort the vendor of NBC property via the main gate.
15. Submitted the completed Chemical Delivery Form to the Plant Manager.
16. If a spill occurs, follow all standard operating procedures outlined in the Spill Prevention Control and Countermeasures Plan for the facility.

Appendix 10

Spill Response Plans

SPILL/RELEASE PLAN
Oils and Other Chemicals

If a chemical/oil spill or release is discovered the procedures outlined in SWMP must be followed. The procedure is as follows:

1. Identify the material.
2. Assess the situation for human health and environmental impacts.
3. Call 911 for injured personnel if necessary.
4. Evacuate the impacted area if necessary.
5. Isolate and protect all storm drains that have the potential to be impacted by the spill/release using sandbags and/or absorbent material.
6. Immediately notify a supervisor.
7. The supervisor will immediately notify the Plant Manager / Operations Manager and the Pretreatment Manager. See Appendix 6 for name and contact information.
8. All personnel working to contain, control and clean-up the spill/release must wear all appropriate personal protective equipment.
9. Keep unauthorized/unaffected staff out of the area.
10. Contain the spill/release using sandbags and/or absorbent materials if possible.
11. Stop the source of the spill/release (i.e. shut valves, upright barrels) if possible.
12. Once the spill/release is stopped, the contained material must be pumped into appropriate containers for proper disposal.
13. Complete a Spill/Release Report which must be filed with the SWMP and in the Pretreatment and ES&C offices.

Spill/Release Response Plan
Hypochlorite

If a spill or release of hypochlorite is discovered the procedures outlined in the SPCC and SWMP must be followed. The procedure is as follows:

1. Identify the material that was spilled/released is hypochlorite.
2. Assess the situation for human health and environmental impacts.
3. Call 911 for injured personnel if necessary.
4. Evacuate the impacted area if necessary.
5. Isolate and protect all storm drains that have the potential to be impacted by the spill/release using sandbags and/or absorbent materials.
6. Immediately notify a supervisor.
7. The supervisor will immediately notify the Plant Manager/ Operations Manager and the Pretreatment Manager. See Appendix 6 for name and contact information.
8. Keep unauthorized/unaffected staff out of the area.
9. All personnel working to contain, control and clean-up the spill/release must wear all appropriate personal protective equipment.
10. Contain the spill/release using sandbags and/or absorbent material if possible.
11. Stop the source of the spill/release (i.e. shut valves, upright barrels) if possible.
12. Once the spill/release has been stopped, the contained material must be pumped into appropriate containers for proper disposal or reuse.
13. Complete a Spill/Release Report which must be filed with the SWMP and in the Pretreatment and ES&C offices.

In addition to following the NBC procedures, the vendor must be contacted as well at the time of discovering the release. The vendor for this material is Univar, USA, Inc. located at 6 Harborside Boulevard, Providence, RI 02905 and the phone number is 401.781.5600.

Spill/Release Response Plan
Sodium Bisulfite

If a spill or release of bisulfite is discovered the procedures outlined in the SPCC and SWMP must be followed. The procedure is as follows:

1. Identify the material that was spilled/released is bisulfite.
2. Assess the situation for human health and environmental impacts.
3. Call 911 for injured personnel if necessary.
4. Evacuate the impacted area if necessary.
5. Isolate and protect all storm drains that have the potential to be impacted by the spill/release using sandbags and/or absorbent materials.
6. Immediately notify a supervisor.
7. The supervisor will immediately notify the Plant Manager / Operations Manager and the Pretreatment Manager. See Appendix 6 for name and contact information.
8. All personnel working to contain, control and clean-up the spill/release must wear all appropriate personal protective equipment.
9. Keep unauthorized/unaffected staff out of the area.
10. Contain the spill/release using sandbags and/or absorbent material if possible.
11. Stop the source of the spill/release (i.e. shut valves, upright barrels) if possible.
12. Once the spill/release has been stopped, the contained material must be pumped into appropriate containers for proper disposal or reuse.
13. Complete a Spill/Release Report which must be filed with the SWMP and in the Pretreatment and ES&C offices.

In addition to following the NBC procedures, the vendor must be contacted as well at the time of discovering the release. If the vendor for this material is Univar, USA, Inc. located at 6 Harborside Boulevard, Providence, RI 02905 and the phone number is 401.781.5600.

Spill/Release Response Plan
Sludge

If a spill or release of hypochlorite is discovered the procedures outlined in the SPCC and SWMP must be followed. The procedure is as follows:

1. Assess the situation for human health and environmental impacts.
2. Call 911 for injured personnel if necessary.
3. Evacuate the impacted area if necessary.
4. Isolate and protect all storm drains that have the potential to be impacted by the spill/release using sandbags and/or absorbent materials.
5. Immediately notify a supervisor.
6. The supervisor will immediately notify the Plant Manager/Operations Manager and Pretreatment Manager. See Appendix 6 for name and contact information.
7. All personnel working to contain, control and clean-up the spill/release must wear all appropriate personal protective equipment.
8. Keep unauthorized/unaffected staff out of the area.
9. Contain the spill/release using sandbags and/or absorbent materials if possible.
10. Stop the source of the spill/release (i.e. shut valves, upright barrels) if possible.
11. Once the spill/release has been stopped, the contained material must be pumped into appropriate containers for proper disposal or reuse.
12. Complete a Spill/Release Report which must be filed with the SWMP and in the Pretreatment and ES&C offices.

Appendix 11

Standard Operating Procedure Minimizing Sludge Impacts

STANDARD OPERATING PROCEDURE
MINIMIZING SLUDGE IMPACTS

In order to ensure that transportation of sludge from the dewatering operation does not impact the Bucklin Point storm water system, the following procedure must be followed:

1. Trucks should only enter the Bucklin Point treatment plant via the gate on Nassau Street.
2. Empty trailers must be placed inside of the Dewatering Building.
3. Sludge from the centrifuges is to be collected in the empty trailer.
4. Once full, the outside of the trailer is to be washed down inside of the building.
5. The wastewater is to be collected in the trench network inside the building and pumped back to the headworks of the plant.
6. Prior to hauling the full trailer, it must be inspected to ensure that all sludge has been removed from it.
7. Trucks hauling full trailers are to exit the plant via the gate on Nassau Street.

If sludge is observed on the ground outside of the Dewatering Building, the following procedure must be followed:

1. Notify the Plant Manager or Operations Manager.
2. The catch basins on the north and south sides of the building must immediately be inspected to determine if they have been impacted.
3. If there is sludge in either of the catch basins create a service request to have them cleaned out.
4. Clean up and dispose of the sludge on the ground.
5. Copies of the completed work order must be kept in the Plant Manager's office.

Appendix 12

Spill/ Release Documentation Form

NBC Spill/Release Documentation Form

Date of Spill/Release: _____
Time of Spill/Release: _____
Weather Conditions at the time of Spill/Release: _____
Name of Reporting Individual: _____
Title of Reporting Individual: _____
Name of Supervisor: _____
Contact Phone Number: _____

Spilled/Released Material: _____
Amount of Material Spilled/Released: _____

Source of the Spill/Release: _____

Are there Storm Drains in the area? Yes No

Did the spill/release leave the facility/enter the environment/storm drains? Yes No
If yes, provide details:

_____
_____

Were any of the following impacted by the spill/release:
Ground Yes No Pavement Yes No Air Yes No
If yes, provide details: _____
_____
_____

Cause of Spill:

_____
_____

Describe any damage or injuries caused by the spill/release: _____
_____
_____

Did the area need to be evacuated? Yes No

Response Measures Taken:

_____
_____
_____

Measures taken to prevent future occurrences:

_____
_____
_____

List the names of individuals and/or organizations contacted as a result of the spill/release:

Name	Organization

Additional Comments:

Supervisor Signature: _____ Date: _____

Plant Manager Signature: _____ Date: _____
Contact Telephone Number: _____

Definitions:
Spill of National Significance means a spill that due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge.

Release as defined by section 101(22) of CERCLA, means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance, or pollutant or contaminant), but excludes: Any release which results in exposure to persons solely with a workplace, with respect to a claim which such persons may assert against the employer of such persons; emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine; release source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of such Act, or, for the purposes of section104 of CERCLA or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under section102(a.1) or 302(a) of the Uranium Mill Tailings Radiation Control Ace of 1978 (42U.S.C. 7901 et seq.); and the normal application of fertilizer. For the purposes of the NCP, release also means threat of release.

Reportable Quantities:

Material	**CAS Number**	**RQ (lbs)**	**RQ (Gal.)**	**Reason for Listing**
Diesel Fuel	68476-34-6	100	14	RCRA - Ignitable
Gasoline	8006-61-9	100	16	RCRA - Ignitable
Sodium Hypochlorite	7681-52-9 / 10022-70-5	100	10	CERCLA RQ
Sodium Bisulfite	7631-90-5	5,000	450	CERCLA RQ
Hydrochloric Acid	7647-01-0	5,000	375	CERCLA RQ
Nitric Acid	7697-37-2	1,000	75	CERCLA RQ
Kerosene	8008-20-6	100	14	RCRA - Ignitable

Appendix 13

Significant Oil Discharge Report Form

NARRAGANSETT BAY COMMISSION
SIGNIFICANT OIL DISCHARGE* FORM

This report is being submitted in conformance with 40CFR112.4.

Bucklin Point Wastewater Treatment Facility
102 Campbell Avenue
East Providence, RI 02916

Send to:
Region Administrator
EPA New England
5 Post Office Square – Suite 100
Boston, MA 02109-3912

Date of Discharge: _____

Person Preparing Report: _____

Maximum Storage Capacity of the Facility: _____

Cause of discharge including failure analysis of system or subsystem where the failure occurred:

_____

_____

Corrective measures taken including equipment repairs and/or replacements: _____

_____

_____

Additional preventative measures taken to minimize the possibility of future occurrences:

_____

_____

Additional comments: _____

_____

_____

_____ _____

Signature of Facility Superintendent Date

Attach a copy of the following:
- Facility Description
- Site Map
- Topographical Map
- Flow Diagrams

Copies of this completed form are to be sent to the RI Department of Environmental Management and filed with the SPCC Plan and the Director of Planning, Policy & Regulation.

*Significant oil discharges equal a onetime release of 1,000 gallons or two discharges of 42 gallons or more within a 12-month period.

Appendix 14

Weekly Inspection Log for Used Oil

WEEKLY INSPECTION LOG FOR USED OIL

Name: _____ Date: _____ Time:_____

1. Provide the volume of used oil in each tank — Tank 1_____ Tank 2_____
2. Date of last pump out — _____
3. Is the area itself secure and protected from storm water? — Yes ____ No ____
4. Are "No Smoking" and "Flammable" signs posted? — Yes ____ No ____
5. Is the area separated from sources of ignition? — Yes ____ No ____
6. Are all containers in good condition? — Yes ____ No ____
7. Do ALL containers have labels that properly identify the contents? — Yes ____ No ____
8. Are all containers labeled with the date when placed in the storage area? — Yes ____ No ____
9. Are all waste containers stored with proper secondary containment? — Yes ____ No ____

Comments (leaking/open drums, drums outdoors, safety concerns, etc.)

_____
_____
_____
_____
_____
_____
_____
_____

Appendix 15

Storage Area Inspection Checklists

Quarterly Inspection Checklist for
Chemical/Oil Storage & General Storm Water Permit Compliance
NBC Bucklin Point Wastewater Treatment Facility

Name of Inspector(s): _____ Title: _____

_____ _____

_____ _____

Inspection Date: _____ Time: _____

Quarter Satisfied: 1st 2nd 3rd 4th

Weather Condition: Sunny Cloudy Rain Overcast Other:_____

Storm Water Discharge Occurring at the Time of Inspection: Yes No

The purpose of quarterly inspections is to comply with the Spill Prevention Control and Countermeasures and Storm Water Management Plans. Thorough inspections of the facility ensure that chemicals and oils are properly stored and contained in case of a spill and ensure that storm water systems are functioning properly so that the Seekonk River is not adversely impacted by NBC operations. The quarterly inspections will identify any issues that require corrective actions necessary to ensure facility compliance with EPA and DEM requirements and permits.

The following Inspection Guidelines have been developed to assist NBC inspectors:

1. Inspect exterior surfaces of tanks, pipes, valves and other equipment for leaks, maintenance deficiencies and any other equipment deficiencies.
2. Inspect spill control and containment structures and equipment for proper containment and identify any deficiencies.
3. Identify any cracks, areas of wear, corrosion and thinning, poor maintenance and operating practices, excessive settlement of structures, separation or swelling of tank insulation, malfunction of equipment and structural foundation weakness.
4. Inspect leak detecting systems, or cathodic protection equipment, if present, along with any other warning systems that may be in place.
5. If there is wet weather accumulation in a containment area, drain if necessary in accordance with approved NBC procedures to allow for proper inspection of the equipment.
6. One quarterly inspection each year should be conducted during a period when storm water is discharging.
7. Once the inspection is completed, service requests/work orders must be created for items that must be addressed.
8. Copies of completed work orders showing all showing all required activities have been addressed must be attached to this completed checklist.

Initials:_____ Date:_____

Quarterly Inspection Checklist for
Chemical/Oil Storage & General Storm Water Permit Compliance
NBC Bucklin Point Wastewater Treatment Facility

North Pond Inspection: This inspection should be conducted during the second quarter inspection and MUST also be conducted after every rain event of 2.70 inches in a 24hr period.

Is there evidence of erosion or gullying on the embankments? Yes ____ No ____
If yes, list what corrective actions will be taken:
_____
_____
_____

Is the planted vegetation species in good condition? Yes ____ No ____
If no, list what corrective actions will be taken:
_____
_____

Are there new plant species taking over the pond that should be removed? Yes __ No ___
If yes, what corrective actions will be taken?
_____
_____
_____

What is the depth of the sediment in the forebays? _____"
Is cleaning needed? Yes ___ No ____
If yes, when will cleaning take place? _____

Is the weir plate on the outlet control structure functioning properly? Yes ___ No ____
If no, what corrective actions will be taken?
_____
_____
_____

Are the gabion baskets on the sediment forebays and rip rap in good condition? Yes __ No ___
If no, what corrective actions will be taken?
_____
_____
_____

Mandatory Cleaning Requirements: The forebays, rip-rap and pond bottom must be cleaned in accordance with the following triggers:

Forebays:	Every five years or 50% of capacity is lost (1.5' depth at the gabion basket wall)
Rip Rap:	Every five years
Pond Bottom:	Every five years or 25" of sediment in the bottom

Based upon the inspection, are any corrective actions required? Yes ___ No ___
If yes, list issue in the summary findings section of this report. Service requests must be generated to address the issue and all completed service requests/work orders must be attached to this inspection report.

Initials:_____ Date:_____

Quarterly Inspection Checklist for
Chemical/Oil Storage & General Storm Water Permit Compliance
NBC Bucklin Point Wastewater Treatment Facility

South Pond Inspection: This inspection should be conducted during the second quarter inspection and MUST also be conducted after every rain event of 2.70 inches in a 24hr period.

Is there evidence of erosion or gullying on the embankments? Yes ____ No ____
If yes, list what corrective actions will be taken:
_____
_____
_____

Is the planted vegetation species in good condition? Yes ____ No ____
If no, list what corrective actions will be taken:
_____
_____

Are there new plant species taking over the pond that should be removed? Yes __ No ___
If yes, what corrective actions will be taken?
_____
_____
_____

What is the depth of the sediment in the rip rap and pond bottom? _____"
Is cleaning needed? Yes ___ No ____
If yes, when will cleaning take place? _____

Mandatory Cleaning Requirements: The rip-rap and pond bottom must be cleaned in accordance with the following triggers:
Rip Rap: Every five years
Pond Bottom: Every five years or 7" of sediment in the bottom

Based upon the inspection, are any corrective actions required? Yes ___ No ___
If yes, list issue in the summary findings section of this report. Service requests must be generated to address the issue and all completed service requests/work orders must be attached to this inspection report.

Initials:_____ Date:_____

Quarterly Inspection Checklist for
Chemical/Oil Storage & General Storm Water Permit Compliance
NBC Bucklin Point Wastewater Treatment Facility

Catch Basin Inspections: Each storm water catch basin is to be inspected to ensure they are properly functioning and to determine if solids need to be removed.

Do any catch basins require repair or need to be cleaned out? Yes _____ No _____

If yes, please indicate the location of each catch basin in need of cleaning or repair:

_____
_____
_____

Street Sweeping Inspections:

Do any areas of the facility need street sweeping? Yes _____ No _____

If yes, please indicate the areas in need of sweeping:

_____
_____
_____
_____

Litter, Garbage and Solid Debris:

Is there litter, garbage or solid debris observed in any area that can impact the storm water system?
Yes_____ No _____

If yes, pick up and dispose immediately.

Based upon the inspection, are any corrective actions required? Yes ___ No ___
If yes, list issue in the summary findings section of this report. Service requests must be generated to address the issue and all completed service requests/work orders must be attached to this inspection report.

Initials:_____ Date:_____

Quarterly Inspection Checklist for
Chemical/Oil Storage & General Storm Water Permit Compliance
NBC Bucklin Point Wastewater Treatment Facility

	Storage Containers/Vessels Condition	Supports and Foundations Condition	Piping and Valves Condition	Spill Containment Structures Condition	Detection Protection Warning Equipment Condition	Evidence of Leaks and Contamination	Comments
Used Oil Storage	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Sludge Dewatering Building	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Service Building	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
O&M Support Building	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Gravity Belt Thickener Building	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Standby Generator No. 1 including Diesel Storage	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Substation No. 1 Including Transformers	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	

Initials:_____ Date:_____

Quarterly Inspection Checklist for
Chemical/Oil Storage & General Storm Water Permit Compliance
NBC Bucklin Point Wastewater Treatment Facility

	Storage Containers/Vessels Condition	Supports and Foundations Condition	Piping and Valves Condition	Spill Containment Structures Condition	Detection Protection Warning Equipment Condition	Evidence of Leaks and Contamination	Comments
Transformers Near Dry Weather Effluent Pump Station	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Chlorine Control Building	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Hypochlorite Storage Tank Area	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Carbon Control Building	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Soda Ash Silos	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Transformers next to Screening Building	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Maintenance Building	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	
Transformers Maintenance Bldg	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Good Poor NA	Yes No	

Initials:_____ Date:_____

Quarterly Inspection Checklist for
Chemical/Oil Storage & General Storm Water Permit Compliance
NBC Bucklin Point Wastewater Treatment Facility

Comments/Additional Information: _____

Initials:_____ Date:_____

Quarterly Inspection Checklist for
Chemical/Oil Storage & General Storm Water Permit Compliance
NBC Bucklin Point Wastewater Treatment Facility

Summary of Inspection Findings

Based upon the inspection conducted on_____, the following items requiring maintenance or corrective actions have been identified and must be addressed:

1	
2	
3	
4	
5	
6	
7	
8	

This report accurately documents the findings of the quarterly facility inspection of chemical and oil storage areas and for storm water permit compliance. Report findings will be forwarded to the facility manager to address corrective actions.

_____ _____
Signature of Inspector Date

Acknowledgement of Inspection Findings

I, _____, Bucklin Point Plant Manager, acknowledge the findings of the quarterly inspection. All issues noted above that required maintenance or corrective actions have successfully been completed. All completed service requests and work orders documenting that the work has been completed are attached.*

_____ _____
Signature of Plant Manager Date

*The original copy of the completed report is to be filed at the facility with the Storm Water Plan and a copy is to be forwarded to the Environmental Science & Compliance Division.

Monthly NBC SPCC Tank Inspection Checklist
Bucklin Point 8,000 gallon Diesel Tank

Inspected by:_____ Date: _____

I.	Check tanks for leaks, specifically looking for:	Yes	No	N/A
A.	Drip marks:			
B.	Discoloration of tanks:			
C.	Puddles containing spilled or leaked material:			
D.	Corrosion:			
E.	Cracks:			
F.	Localized dead vegetation:			
II.	**Check foundation for:**			
A.	Cracks:			
B.	Discoloration:			
C.	Puddles containing spilled or leaked material:			
D.	Settling:			
E.	Gaps between tank and foundation:			
F.	Damage caused by vegetation roots:			
III.	**Check piping for:**			
A.	Droplets of stored material:			
B.	Discoloration:			
C.	Corrosion:			
D.	Bowing of pipe between supports:			
E.	Evidence of stored material seepage from valves or seals:			
F.	Localized dead vegetation:			

From Appendix F of 40 CFR part 112

For any inspection item marked "yes" give a detailed description of the problem noted:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Appendix 16

Visual Assessment Standard Operating Procedure & Report Form

Standard Operating Procedure
Visual Assessments of Storm Water Discharges

Visual assessments of the storm water discharged from the facility must be conducted four times per year twice between January 1st and June 30th and twice between July 1st and December 31st. These assessments must be conducted on measurable storm events. Measurable events are storm events that result in an actual discharge of storm water from the facility. The following procedure must be used when conducting visual assessments:

1. Monitor the weather to determine when a storm may occur.
2. Once it is determined a storm will occur assess if the storm will meet assessment criteria:
    a. Will there be a discharge
    b. When was the last measurable storm event (if less than 48 hrs. before the storm does not qualify)
    c. When it has been at least 30 days since the last visual assessment
3. If the storm qualifies, staff is to be dispatched to collect samples within the first 30 minutes of the discharge..
4. Grab samples are to be collected in glass bottles from each designated catch basin.
5. The samples are to be assessed for the following:
    a. Color
    b. Clarity
    c. Foam
    d. Odor
    e. Oil Sheen
    f. Floating Solids
    g. Settled Solids
    h. Suspended Solids
    i. Other Obvious Indicators of Pollution
    j. Probable Sources of Pollution if Observed
6. The Storm Water Visual Assessment Form must be completed in its entirety. The following fields must be completed:
    a. Sample Collector
    b. Date of Assessment
    c. Date of Rain Event
    d. Event Duration
    e. # of Days Since Last Measurable Storm
    f. Event Total Rainfall in inches
    g. Monitoring Period
    h. Type of Event
    i. Time each sample is collected
7. The completed Storm Water Visual Assessment Form is to be signed by the staff member who prepares the report and Plant Manager.
8. The original completed form is sent to the Plant Manager to be kept with the SWMP and copies are to be forwarded to the ES&C office and Pretreatment Manager.

NBC Storm Water Visual Assessment Form
Bucklin Point Wastewater Treatment Facility

Sample Collector: _____ Date of Rain Event: _____ # of Days Since Last Measurable Event: _____

Date: _____ Event Duration: _____ hrs. Total Rainfall: _____ in.

○ January 1st - June 30th ○ July 1st - December 31st

Type of Event: ○ Rainstorm ○ Snow Melt ○ Runoff

	Sample Location					
	Sample Location #007-Y South Drainage Gate	**Sample Location #002-Y South Diversion Structure**	**Sample Location #003-Y North of GBT Catch Basin**	**Sample Location #004-Y South of GBT Catch Basin**	**Sample Location #005-Y North Drainage Gate**	**Sample Location #006-Y North Diversion Structure**
Time Sample Collected						
Color	○ No Color ○ _____	○ No Color ○ _____	○ No Color ○ _____	○ No Color ○ _____	○ No Color ○ _____	○ No Color ○ _____
Clarity	○ Transparent ○ Cloudy ○ Muddy ○ Opaque	○ Transparent ○ Cloudy ○ Muddy ○ Opaque	○ Transparent ○ Cloudy ○ Muddy ○ Opaque	○ Transparent ○ Cloudy ○ Muddy ○ Opaque	○ Transparent ○ Cloudy ○ Muddy ○ Opaque	○ Transparent ○ Cloudy ○ Muddy ○ Opaque
Odor	○ No ○ Yes	○ No ○ Yes	○ No ○ Yes	○ No ○ Yes	○ No ○ Yes	○ No ○ Yes
Settled Solids	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No
Suspended Solids	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No
Floating Solids	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No
Foam	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No
Oil Sheen	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	○ Yes ○ No

NBC Storm Water Visual Assessment Form
Bucklin Point Wastewater Treatment Facility

	Sample Location					
	Sample Location #007-Y South Drainage Gate	**Sample Location #002-Y South Diversion Structure**	**Sample Location #003-Y North of GBT Catch Basin**	**Sample Location #004-Y South of GBT Catch Basin**	**Sample Location #005-Y North Drainage Gate**	**Sample Location #006-Y North Diversion Structure**
Other Obvious Indicators of Storm Water Pollution						
If Contamination is observed indicate probable source						

Were the samples collected within the first 30 mins of actual discharge? _____ Yes _____ No
If no, explain why it was not possible to collect the samples within the first 30 mins:

Guidelines for Monitoring:

- Storm event must result in an actual discharge from the facility.
- Grab sample MUST be collected with in the FIRST 30 minutes of discharge where practicable.
- Storm event monitoring MUST occur at least 48 hrs. from the previous measurable event and at least 30 days since the previous assessment.
- Monitoring events for snow melt discharges must be performed when a measurable discharge occurs from the site.

I certify under penalty of law that this document and all attachments were prepared under the direction or supervision with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on ny 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 fines or imprisonment for knowing violaitons.

_____ _____
Signature of Preparer of this Report Date

_____ _____
Signature of Bucklin Point Facility Manager Date

Narragansett Bay Commission
Bucklin Point Wastewater Treatment Facility
102 Campbell Avenue
East Providence, RI 02916
401.461.8848

Appendix 17

Visual Assessment Report Summary

Bucklin Point Visual Assessment Summary

Sample Date	Sampling Period	Type of Discharge	Sample Location #001-Y South Drainage Gate	Sample Location #002-Y South Diversion Structure	Sample Location #003-Y North of GBT Catch Basin	Sample Location #004-Y South of GBT Catch Basin	Sample Location #005-Y North Drainage Gate	Sample Location #006-Y North Diversion Structure	Date of Last Rain Event	Duration of Last Rain Event	# Day since Last Rain Event	Comments

Appendix 18

Standard Operating Procedures Benchmark and Impaired Water Monitoring and DMRs

STANDARD OPERATING PROCEDURES
BENCHMARK AND IMPAIRED WATER MONITORING AND DMRS

Monitoring of the storm water discharged from the facility must be conducted four times per year from each designated location. Two of the monitoring events are to be conducted between January 1st and June 30th and two are to be conducted between July 1st and December 31st. The monitoring must be conducted on measurable storm events. Measurable events are storm events that result in an actual discharge of storm water from the facility. The following procedure must be used when conducting monitoring:

1. Monitor the weather to determine when a storm may occur.
2. Once it is determined a storm will occur assess if the storm will meet assessment criteria:
    a. Will there be a discharge
    b. When was the last measurable storm event (if less than 48 hrs. before the storm does not qualify)
    c. When it has been at least 30 days since the previous monitoring event.
3. If the storm qualifies, staff are to be dispatched to collect samples within the first 30 minutes of the discharge.
4. Grab samples are to be collected in the container appropriate for each parameter from each designated catch basin and brought to the laboratory.
5. The samples are to be analyzed f for the following parameters using standard analytical methods as determined in 40CFR136:
    a. Total Nitrogen (as N)
    b. Coliform, fecal general
    c. Total Suspended Solids
    d. Oil & Grease
6. Once the analytic data has been certified it must be entered in a Discharge Monitoring Report (DMR) for each location.
7. The DMRs must be forwarded to the Director of ES&C for signature.
8. The completed DMRs must be submitted electronically to DEM using the NetDMR system no later than 15 days after the last day of the monitoring period (July 15th and January 15tH.
9. If the analytical results exceed a numeric effluent limit, the location must be resampled within 30 calendar days (or during the next qualifying event) of implementing corrective actions.
10. Copies of the DMRs must be kept with the SWMP in the ES&C office and Pretreatment offices.

Edit DMR

Form Approved OMB No. 2040-0004 expires on 07/31/2026

Expand Notices
Collapse Header

Permit

Permit ID:	RIR50T002	**Major:**	☐
Permittee:	NARRAGANSETT BAY COMMISSION	**Permittee Address:**	ONE SERVICE ROAD PROVIDENCE, RI 02905
Facility:	BUCKLIN POINT WASTEWATER TREATMENT FACILITY	**Facility Location:**	102 CAMPBELL AVENUE RUMFORD, RI 02916
Permitted Feature:	002 - External Outfall	**Discharge:**	T1 - T1 Benchmark - TREATMENT WORKS

Report Dates & Status

Monitoring Period:	From 07/01/24 to 12/31/24	**DMR Due Date:**	01/15/25
Status:	**Ready for Data Entry**		

Principal Executive Officer

First Name:		**Last Name:**	
Title:		**Telephone:**	

No Data Indicator (NODI)

Form NODI:

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
00530	**Solids, total suspended**	Smpl.				-		-	mg/L		02/RP	GR
1 - Effluent Gross												
Season: 0		Req.				Req Mon Minimum		Req Mon Maximum	Milligrams per Liter		Twice Per Rpt Period	GRAB
NODI:		NODI										
00556	**Oil & Grease**	Smpl.				-		-	mg/L		02/RP	GR
1 - Effluent Gross												
Season: 0		Req.				Req Mon Minimum		Req Mon Maximum	Milligrams per Liter		Twice Per Rpt Period	GRAB
NODI:		NODI										

Edit DMR

Form Approved OMB No. 2040-0004 expires on 07/31/2026

Expand Notices
Collapse Header

Permit

Permit ID:	RIR50T002	**Major:**	☐
Permittee:	NARRAGANSETT BAY COMMISSION	**Permittee Address:**	ONE SERVICE ROAD PROVIDENCE, RI 02905
Facility:	BUCKLIN POINT WASTEWATER TREATMENT FACILITY	**Facility Location:**	102 CAMPBELL AVENUE RUMFORD, RI 02916
Permitted Feature:	002 - External Outfall	**Discharge:**	IW - Impaired Water

Report Dates & Status

Monitoring Period:	From 07/01/24 to 12/31/24	**DMR Due Date:**	01/15/25
Status:	**Ready for Data Entry**		

Principal Executive Officer

First Name:		**Last Name:**	
Title:		**Telephone:**	

No Data Indicator (NODI)

Form NODI:

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
00600	**Nitrogen, total [as N]**	Smpl.				-		-	mg/L		02/R/P	GR
1 - Effluent Gross												
Season: 0		Req.				Req Mon Minimum		Req Mon Maximum	Milligrams per Liter		Twice Per Rpt Period	GRAB
NODI:		NODI										
74055	**Coliform, fecal general**	Smpl.				-		-	MPN/100mL		02/R/P	GR
1 - Effluent Gross												
Season: 0		Req.				Req Mon Minimum		Req Mon Maximum	Most Probable Number (MPN) per 100ml		Twice Per Rpt Period	GRAB
NODI:		NODI										

Appendix 19

Standard Operating Procedures Discharge of Storm Water from Secondary Containment

STANDARD OPERATING PROCEDURE
DISCHARGING STORM WATER FROM SECONDARY CONTAINMENT

Storm water accumulates in outside secondary containment areas during rain and snow storms. Prior to discharging storm water accumulated in secondary containment areas the following procedures must be followed:

1. The containers must be inspected to ensure they are in good condition and not leaking.
2. If the containers are not leaking, a visual inspection of the storm water must be performed.
3. If there is a visible oil sheen on the storm water, the sheen may be removed by absorbent pads. If the sheen remains, the storm water must be pumped out for proper disposal.
4. If the container in the secondary containment is used for the storage of hypochlorite, the storm water must be analyzed for the presence of chlorine if the container is not in good condition.
5. If the analysis does not show the presence of chlorine, the storm water may be discharged.
6. If chlorine is present, the storm water must be pumped out for proper disposal.
7. Complete the Discharge of Storm Water from Secondary Containment Inspection Form.

After the visual inspection of the storm and/or ground water confirms the water is okay to discharge, you must test the pH of the storm/ground water and indicate the reading on the attached checklist. The pH must be in the range of 6.0 to 9.0 standard units.

If the location of the storm/ground water is in an area where it can be discharged back to the treatment process it is to be pumped there.

DISCHARGE OF STORM WATER FROM SECONDARY CONTAINMENT
INSPECTION CHECKLIST

	Evidence of Containers / Piping Leaking	**Visible Sheen / Signs of Contamination**	**Chlorine Residual**	**pH**
Sodium Hypochlorite Tank Farm	❑ Yes ❑ No	❑ Yes ❑ No	❑ Yes ❑ No	_____
8,000 gallon Diesel	❑ Yes ❑ No	❑ Yes ❑ No	❑ Yes ❑ No	_____
Use Oil Storage Area	❑ Yes ❑ No	❑ Yes ❑ No	❑ Yes ❑ No	_____

Comments: _____

_____

_____

_____

_____ _____ _____ _____

Signature of Inspector | Date | Signature of Facility Manager | Date

Appendix 20

NBC Resiliency Plan

The information in this Appendix has been deemed restricted in accordance with Section V.H of the MSGP

From Appendix A of the MSGP:

“Restricted Information – for the purposes of this permit, information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, Executive Orders, or regulations. Such information includes but is not limited to: classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information.”