Storm Water Pollution Prevention Plan
For Allenstown Municipal Wastewater Treatment Facility

Facility Name: __Allenstown Wastewater Treatment Facility (WWTP)__

Facility Address: _35 Canal Street_____
_Allenstown, NH 03275_____

1. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) OVERVIEW

This Storm Water Pollution Prevention Plan serves as the Stormwater Pollution Prevention Plan (SWPPP) for Allenstown Wastewater. It identifies those actions that staff will take to comply with the permit and will:

- Continue to implement nonstructural best management practices (BMPs) or immediately after the SWPP is developed or updated;
- Include a schedule for implementation of structural BMPs;
- Inspect the effectiveness of BMPs periodically;
- Conduct periodic visual inspection of discharges from the facility during wet and dry conditions; and
- Update the SWPPP when changes that impact stormwater or other revisions occur at the site.

Allenstown's WWTP is located at 35 Canal Street and encompasses an area of approximately 11 acres. The area is moderately developed and has a moderate traffic volume. Surrounding the facility is a mix of residential, commercial and industrial properties. Several buildings are located on the site, as well as structures that are part of the wastewater treatment process. Approximately 3.9 acres of the site is covered with impervious surfaces. Buildings onsite include:

- Administration building
- Septage receiving station building
- Odor control building
- Effluent building
- Biomag building
- Pump house

Process-related Structures on site are:

- Aeration tanks
- Sludge and septage storage tanks
- Secondary clarifiers
- Chlor/dechlor tanks
- Solids handling facilities.

The Allenstown Wastewater Treatment facility is situated on a hillside, southeast of the confluence of the Suncook and Merrimack Rivers. Stormwater that falls upon the facility is collected in a site drainage system and is eventually discharged to the Suncook River. For a full discussion of the system of facilities and procedures in place for any potential discharges of oil, please see the attached Spill Prevention Control and Countermeasure Plan.

Please add any additional information that you have that SUMMARIZES the following:

- Description of the facility, with information on location and activities, and a description of the storm water drainage system;
- Identify any potential storm water contaminants;
- Describe storm water management controls and various Best Management Practices (BMPs) needed to reduce pollutants in storm water discharges;
- Describe the facility's monitoring plan; and,
- Describe the implementation schedule and provisions for amendment of the plan.

The Allenstown Wastewater treatment Facility is an extended aeration treatment facility. Aeration is achieved by means of diffused air. The facility consist of solids screening with backup grinding, grit removal, anaerobic/anoxic/aerobic selectors, secondary clarification, coagulation/flocculation, chlorine contact, septage receiving, and dewatering. The treatment process is biological with chemical enhancement. Stormwater enters the MS4 through catch basins on site, which is fairly flat, and discharges through the nearest outfall. No vehicle washing takes on pavement, but in grassed areas nearby. Potential contaminants could come from winter salt, which we minimize and only use as needed. SPCC plan is in place and current per NHDES requirements, will update as need and required by NHDES.

2. PLANNING AND ORGANIZATION

2.1. SWPPP Coordinator and Team

Allenstown has formed a pollution prevention staff to oversee implementation of this SWPP. The Team will annually review the SWPP and confirm its implementation. The SWPP will be modified as needed, at least annually, to reflect any changing conditions at the WWTP site, including any new operations, site modifications or BMP's. The Team's responsibilities are discussed in detail below and are responsible for implementing this Storm Water Pollution Prevention Plan in accordance with Section 2.3.7.2.b.i of the Permit. Should staff assignments change, this roster will be updated. NOTE: Roxanna Thomas is the Assistant Superintendent and assumes the responsibilities below if the Superintendent is not available. The contact information is the same.

Leader: _____Jeffrey Backman_____ Office Phone: __603-485-5600 X310___

Title: _____Superintendent_____ Cell Phone/Beeper # _____

Responsibilities:

Supervisory responsibility; coordinates all stages of plan development, inspections and implementation; coordinate employee training programs; keeps all records and ensures that reports are submitted; oversees sampling program.

Staff: _____Jeffrey Backman_____ Office Phone: _____603-485-5600 X310_

Title: _____Superintendent_____ Cell Phone/Beeper # _____

Responsibilities:

Implement the preventive maintenance program; oversee good housekeeping activities; serves as spill response coordinator and permit compliance coordinator.

Staff: _____Jeffrey Backman_____ Office Phone: 603-485-5600 X310_____

Title: _____Superintendent _____ Cell Phone/Beeper # _____

Responsibilities:

Conduct/assist with inspections and training program; conduct sampling.

3. ASSESSMENT

3.1. Site Description

The Town of Allenstown's wastewater treatment facility is located at 35 Canal Street, Allenstown, NH. The Site Map (Attachment 1) shows the location of the facility. The facility is a Modified Ludzack-Ettinger (MLE) process treatment facility. The facility also uses the "Biomag" advanced treatment process. The facility consists of administration, screening, grit removal, MLE process basins, secondary clarifiers, "Biomag" treatment, chlorine disinfection, and sludge dewatering. The plant is located on 11 acres. The facility has a front loader, ¾ ton truck, 1 ton truck, a four passenger vehicle. The plant has one outfall, wastewater outfall 001 discharging to the Town's storm system.

There is vehicle washing on site on a grassy area (see map for location). There is also #2 diesel storage contained in one 2,000 gallon tank in a monolithic concrete containment dike. For additional information, see the attached Spill Prevention Control and Countermeasure Plan.

3.2. Site Map

Attachment 1 is a map of the facility showing potential sources of pollution.

3.3. Significant Material Inventory (Anything listed in Attachment 2 needs to be identified on the site map)

Attachment 2 lists the materials and chemicals stored in areas that could drain to the storm drainage system and pose a potential threat to stormwater. Materials may be moved frequently and subsequently, quantities can change regularly.

3.4. Vehicle Wash Water and Wastewater

Vehicle washing takes place outdoors in a designated area, grassed area. Wash water runs off as sheet flow to a vegetated area.

3.5. Salt Storage

This facility does not have salt storage on site. If salt storage is added, this Plan will be revised to ensure that the storage area meets the requirements of the Storm Water General Permit.

3.6 Spills and Leaks

Attachment 3 identifies significant (> 5 gallons) spills of oils, toxic or hazardous materials that have occurred in the last 3 years. There are no chronic leaks of oils, toxic or hazardous materials onsite.

3.7 Non-Storm Water Discharges

Can you certify that all discharges (e.g., outfalls) have been tested or evaluated for the presence of non-storm water discharges. To certify you must:

- Identify potential non-storm water discharges
- Describe the method used and results of any test/evaluation for these discharges
- Show locations of outfall or drainage points that were checked during the test/evaluation
- Provide the date of the test/evaluation
- Describe what you plan to do about them

Cannot certify; please refer to Attachment 5.

3.8 Allowable Non-Storm Water Discharges

Certain sources of storm water are allowable, such as fire hydrants, potable water, compressor condensate, irrigation drainage, landscape watering, pavement washing without detergents, exterior building washing without detergents and uncontaminated groundwater. The following are allowable non-storm water source and the location where it is likely to be discharged.

Fire hydrants	Catch basin
Potable water	Catch basin
Compressor condensate	Catch basin
Irrigation drainage	Catch basin
Landscape watering	Catch basin
Pavement washing without detergents	Catch basin
Building washing	Catch basin
Uncontaminated groundwater	Catch basin

3.9. Existing Storm Water Monitoring Data

The Allenstown wastewater treatment facility has no historical monitoring data.

3.10. Site Summary (Sources of pollution with a high risk of contaminating storm water)

There are no sources of pollution that are identified as high risk.

4. IMPLEMENTATION

The following practices are in place or will be implemented to control pollutants that have the potential to contaminate storm water.

4.1. Good Housekeeping

Good housekeeping practices are the most effective first step towards preventing pollution in storm water. The following is a list of good housekeeping practices followed at this facility:

- Spills are immediately cleaned up with an absorbent.
  All fluid products and wastes are kept indoors.
- Used antifreeze is kept in a covered container.
- All changing of fluids is done indoors.
- Liquid and dry materials are stored indoors

- Spigots/funnels are used to minimize leaks.
- Changing of fluids is done inside.

4.2. Preventive Maintenance

Allenstown WWTP has a preventive maintenance program that involves inspections and maintenance of storm water management controls and routine inspections of facility operations to detect faulty equipment. Equipment, such as tanks, containers and drums, are checked regularly for signs of deterioration.

The following is a list of preventive maintenance measures practiced at this facility.

- This facility has a written spill prevention and response policy.
- All staff are aware of spill prevention and response procedures
- Spill response equipment is located at all potential spill areas.
- All transfers to and from the tank are observed by qualified personnel trained in spill response procedures.
- Catch basins and sediment chambers are checked and cleaned as needed.
- Drainage swales are kept clear.
- Retention basins are cleaned out as necessary.
- Hydraulic equipment is kept in good repair to prevent leaks.
- Outdoor drum and storage tank containment areas are checked for leaks.
- Uncontaminated storm water in containment areas is kept to a minimum.
- Regular inspection of tank storage areas.

4.3. Best Management Practices (BMPs)

This section describes the best management practices (BMPs) identified for the Allenstown WWTP Site. Stormwater BMPs include structures, activities, or practices intended to help prevent or reduce stormwater pollution. This section also discusses personnel and training requirements, and the BMPs currently implemented at the site. When implemented, the BMPs will prevent or reduce the discharge of potential pollutants in storm water runoff for each area of concern listed in the Site Summary.

Loading and unloading areas: To prevent or reduce the potential of storm water contamination in the loading and unloading areas, the following BMPs will be implemented.

- Loading and unloading are done inside where possible.
- Hazardous materials that are in easily ripped or breakable containers (such as bags, plastic pails) are not loaded or unloaded outside when it rains.
- A staff member is present during loading and unloading operations.
- When drums are being handled, the storm sewer is covered to help contain potential spills.

Outdoor storage

- Diesel fuel tank. This above ground tank has secondary containment capable of holding the entire contents of the tank. There is also a roof over the tank.
- A member of the spill response team is on hand at all times during filling.
- Scrap metal. All scrap metal is cleaned of hazardous materials prior to storage on the scrap metal pile. Salvage vehicles have fluids removed prior to storage.
- Dumpster lid is closed except when in use.

4.4. Sediment and Erosion Control

There are no potential areas for erosion on this site as it is flat and is paved.

4.5. Management of Storm Water Runoff

The following management practices for runoff are used at this facility.

- Drainage areas drain to an area collected and pumped to wastewater treatment processes
- Impervious areas have no curbs in order to encourage sheet flow runoff to vegetative areas.

4.6. Spill Prevention and Response

Loading/unloading area:

- Spill response equipment is kept in the administration building storage, including the attached Spill Prevention Control and Countermeasure Plan (SPCC) prepared by Hoyle Tanner & Associates in 2013. All personnel are instructed in its location and use.
- The pollution prevention team leader or the spill coordinator will be advised immediately of all spills of hazardous materials or regulated materials, regardless of quantity.
- Spills will be evaluated to determine the necessary response. If there is a health hazard, fire or explosion potential, 911 will be called. If a spill is large or threatens surface waters, including storm drains, state or federal emergency response agencies will be called.
- Spills will be contained as close to the source as possible with a dike of absorbent materials from the emergency spill kit. Additional dikes will be constructed to protect swales or other storm water conveyances of streams. A cover or dike will protect any other storm water structures such as catch basins.
- The following are contacts that may be notified during a spill response:
    - NHDES Spill Response (Monday through Friday, 8AM to 4 PM): (603) 271-3899
    - NHDES Spill Response (Evenings and Weekends via State Police): (603) 223-4381
    - Allenstown Fire Department: 911
    - Allenstown Police Department: 911
    - USEPA National Response Center: 1-800- 424-8802

- Attachment 7 is Allenstown's Spill Prevention Control and Countermeasure Plan, March 2013

4.7. Employee Training

Employee training is an ongoing program and will be provided for all existing employee on an annual basis and for all new employees when they start work at the Allenstown WWTP. A storm water pollution prevention employee training program must be developed. Training material content will include such topics as spill prevention and response, good housekeeping, visual inspection procedures and materials management practices. Attendance sheets will be kept with the SWPP. Storm water training can be combined with other training such as health, safety or emergency response.

Pollution prevention team members will meet as needed to discuss the effectiveness of and improvements to the Plan.

Example training video:
https://www.youtube.com/watch?v=6eD29UBINqE&feature=youtu.be

5. EVALUATION

5.1. Semi-annual Visual Monitoring

Semi-annually the Allenstown WWTP will **visually** examine the storm water discharges at each outfall. The visual examination will be made during daylight hours and within 30 minutes after storm water begins to runoff. Any observed contamination/problems will be documented with date and time. Any identified source of contamination will be noted and action will be taken to eliminate it. A quarterly monitoring log is shown in Attachment 4.

5.2. **Annual Site Inspections** (Comprehensive Site Compliance Evaluation)

Allenstown WWTP will inspect its entire facility at least **once a year** for evidence of pollution, evaluation of BMPs that have been implemented, and inspection of equipment. The site inspection report will include date of inspection, name of personnel conducting the inspection, observations, assessment of BMP's, corrective actions taken, and a signed certification.

A Compliance Evaluation Report will be generated that will be kept with the SWPPP. Both the Evaluation Report and any reports of follow-up action will be certified in conformance with the following language: "This Compliance Evaluation Report has been prepared by qualified personnel who properly gathered and evaluated information submitted for this Report. The information in this Report, to the best of my knowledge, is accurate and complete."

5.3. Recordkeeping and Reporting

All forms completed pursuant to this SWPP will be maintained and kept for at least **three** years. Records of spills, leaks, inspections and maintenance activities will be kept as well as employee training records. The following forms will be kept on file:

- SWPP Revision document
- Visual Inspection Forms
- Annual BMP Evaluation Form
- Spill Response Plan Form

5.4. Plan Revisions

Any **c**hanges in Allenstown's WWTP layout or operations require changes in the Storm Water Pollution Prevention Plan. If this facility expands its operations, or changes any significant material handling or storage practices which could impact storm water, this SWPPP will be amended. Any administrative changes will also be reflected in an amended SWPP. The amended Plan will describe the new activities that contribute to increased pollution and planned control measures.

This Plan will also be amended if a state or federal inspector determines that it is not effective in controlling storm water pollutants discharged to waterways.

6. ENDANGERED SPECIES

In accordance with Section 1.9.1 of the MS4 Permit, endangered species are not threatened by the MS4 system. Per Appendix C of the Permit, the Merrimack River is potential habitat for Atlantic Sturgeon. In consultation with the National Marine Fisheries Services (NOAA), the series of dams located in the Merrimack River prevent both Atlantic and Shortnose Sturgeon from moving upstream beyond the Essex Dam in Lawrence, MA.

Additional research was conducted on the US Fish and Wildlife Service website. A Section 7(c) species list was created for the project area by the Fish and Wildlife Service and the gindings were as follows:

- One Threatened species was present in the area: Small Whorled Pogonia.
- There are no critical habitats in the area.

Per Appendix C, Section D, Step 1 (Determining if Criteria A can be met), there are no endangered species or critical habitat in the project area.

Using best judgment and the information above, we have evaluated the effects of this facility's storm water discharges on listed endangered or threatened species, or critical habitat. We do not have reason to believe that listed endangered or threatened species, or critical habitat are adversely affected.

7. HISTORIC PLACES

In Attachment 8 there is correspondence from the New Hampshire State Preservation Office indicating that there is no potential to cause any effects on historic places.

8. CERTIFICATIONS

Non-Storm Water Discharges

All storm water outfalls to surface waters at this facility have been evaluated and found to be free of non-storm water discharges.

Storm Water Pollution Prevention Plan

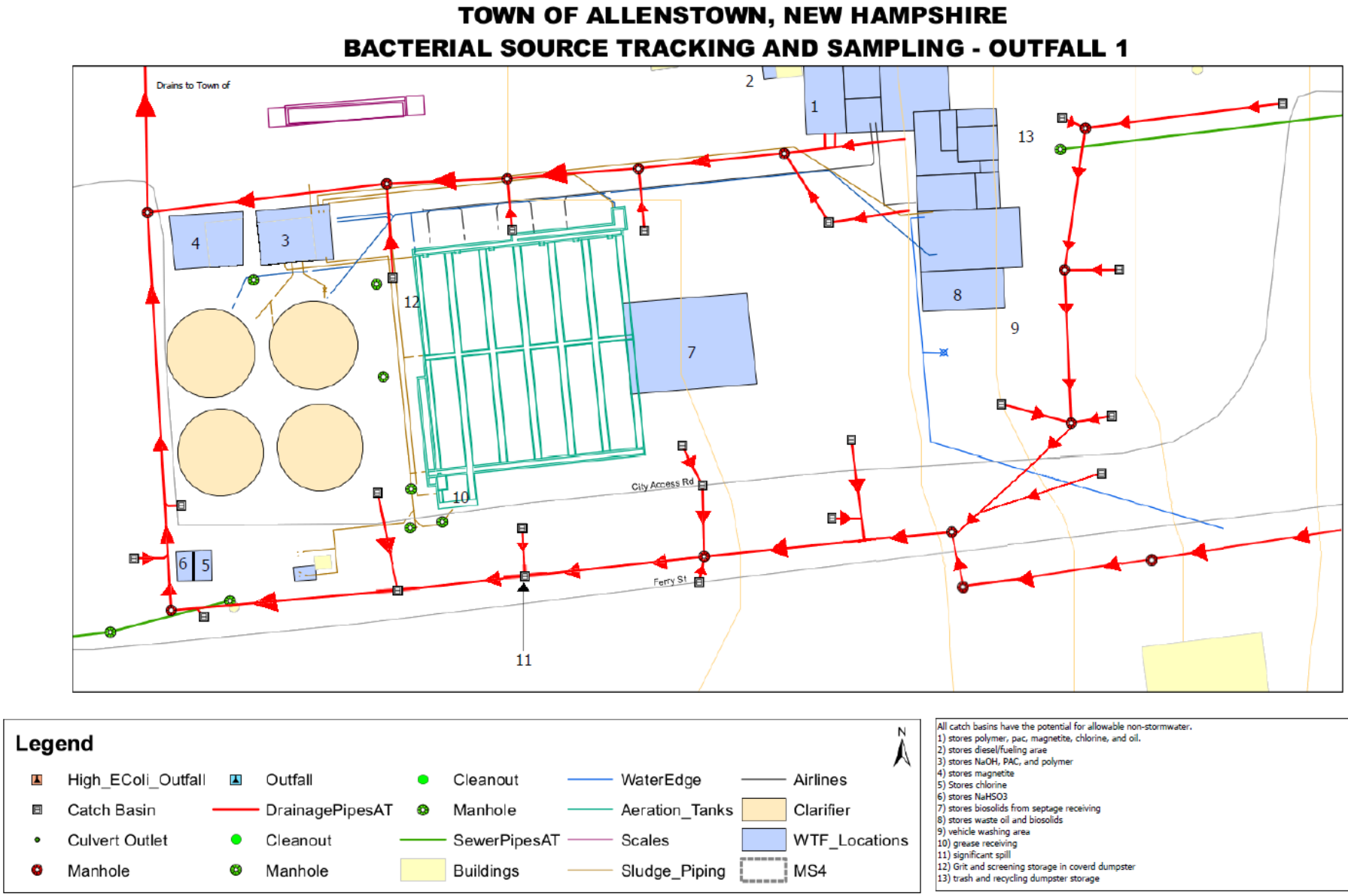
This Storm Water Pollution Prevention Plan has been prepared in accordance with good engineering practices. Qualified personnel properly gathered and evaluated information submitted for this Plan. The information in this Plan, to the best of my knowledge, is accurate and complete.

Jeffrey Bachman
Name

Superintendent
Title

7/6/2020
Date

Attachment 1 - Site Map



Attachment 2
SWPPP Material Inventory

Material	Activity/ Use	Quantity stored (tank size if applicable: above or below ground)	Pollutant	Likelihood of contact with storm water? (Low, medium or high)	Comments
Gasoline/diesel	storage	2000 gallons above ground. Inside.	oily sheen	low	Spill Prevention and Response Plan
Sodium Hypochlorite	storage	1500 gallon tank in effluent building 1000 gallons storage in odor control building 1500 gallon storage in admin building.	NaOCL	low	Stored inside.
Sodium Bisulfite	storage	1500 gallon	NaHSO3	low	Stored inside
Waste oil/ anti-freeze	storage	100 gallons	Oil/anti-freeze	low	Stored inside
Biosolids dumpsters	storage	30 and 25 yards	biosolids	low	Stored inside

Attachment 2. SWPPP Material Inventory - page 2

Material	Activity/Use	Quantity stored (tank size if applicable: above or below ground)	Pollutant	Likelihood of contact with storm water? (Low, medium or high?)	Comments
Poly aluminum chloride	storage	500 gallon tank in pump house. 1400 gallon storage in admin. building	Aluminum salts	low	Stored inside
Sodium Hydroxide	storage	1000 gallon tank storage in pump house.	NaOH	low	Stored inside
Polymer	Receiving/storage	1500 gallons	polymer	low	bump protection, drip capture, spill response plan
Vehicle/equipment	storage	NA	engine oil hydraulic fluid	Low, small leaks, drips	repair leaks, use absorbent pads
Grit and screenings container	storage	20 yards	Bacteria/biosolids	low	covered
Vehicle/equipment	washing	NA	sand, salt, oil detergent	low	Away from storm drains

Completed by:
Title:
Date:

Attachment 2a

Site Summary (Activities with a High Risk of Contaminating Storm Water)

Activity	Pollutants	Current Practices	Future Practices
None known at this time. SPCC plan addresses potential releases or spills.	None known at this time. SPCC plan addresses potential releases or spills.	None known at this time. SPCC plan addresses potential releases or spills.	None known at this time. SPCC plan addresses potential releases or spills.

Completed by:
Title:
Date:

Attachment 3
List of Significant Spills (> 5 gallons)

Instructions: List significant (> 5 gallons) spills of oils, toxic or hazardous materials that have occurred in the last 3 years. Show these areas on the site map.

Date	Spill	Leak	Source	Description			Response Procedures	Measures Taken to Prevent Recurrence
	(check one)			Type of Material	Quantity	Reason		
3/14/2013	X		Septage receiving	Septage/grease	10 gallons	backup	Absorbed and disposed absorbent	Installed berm for containment

Completed by:
Title:
Date:

Attachment 4
Annual Visual Monitoring Inspection Log
for Storm Water Pollution

Date	Time	Town storm water system	Weather Conditions	Observations (contaminants observed/ erosion/sediment runoff	Probable Source of Any Observed Contamination	Action Taken to Prevent in Future

Completed by:
Title:
Date:

ATTACHMENT 5

General Facility Activities and *Potential* Impacts on Stormwater										
Facility activity	**Description of Facility activity**	**Potential pollutants in stormwater runoff**								
		Sediment/ suspended solids	**Nutrients**	**Metals**	**Bacteria**	**Hydrocarbons**	**Other organics**	**Dissolved solids**	**Oxygen demanding substances**	**Abnormal pH**
Storage of liquid materials in stationary tanks	A 2,000 gallon tank containing diesel fuel is located on site.					✓			✓	
Fueling operations	Fueling is conducted at the fuel tank (See Map)					✓				
Storage of solid waste	Dumpster with lids	✓	✓	✓	✓	✓	✓		✓	✓
Loading and unloading area for liquid and solid material	Loading chemicals and biosolids	✓	✓	✓	✓		✓	✓	✓	
Vehicle parking and storage	Parking of town vehicles occurs	✓		✓		✓	✓			
Vehicle Washing	Washing of vehicles occurs	✓		✓		✓	✓			
Biosolids truck loading	Loading truck	✓		✓	✓		✓			

ATTACHMENT 6
BMPs for WWTP Site Activities

Please review one last time that the following information is correct. Please fill out the last two columns for each BMP listed.

Facility Activity	Location	BMPs	Currently in Place (√)	New Measure &Target Date
G0eneral (Good Housekeeping)	Facility Wide	▪ Sweep paved areas annually ▪ Clean debris and other storage areas on a schedule ▪ Remove trash and garbage weekly ▪ Inspect weekly for leaks or spills	✓	Ongoing.
Storage of liquid materials in tanks	Fuel Tanks	▪ Store and maintain appropriate spill cleanup materials near storage area. Ensure that employees are aware of spill and cleanup procedures. ▪ Check tanks daily for leaks and/or spills ▪ Keep area clean	✓	Ongoing.
Fueling Operations	Fuel Tanks	▪ Store and maintain spill kit in a known location. ▪ Conduct any spill response exercises ▪ Tanks are secure and have roof covering	✓	Ongoing.
Outside Storage of materials (non-container)	Storage areas	▪ Sweep areas as needed ▪ Store equipment in covered area	✓	Ongoing.
Vehicle and equipment parking and storage	Parking areas	▪ Keep parking area clean of debris and dirt ▪ Inspect for any leaks	✓	Ongoing.
Storage of solid waste	Plant grounds	▪ Cover storage containers with lids ▪ Regularly inspect containers for leakage	✓	Ongoing.
Loading and unloading areas for liquid and solid material	Plant grounds	▪ Inspect equipment to capture any leaks or spills ▪ Have staff person present during operations	✓	Ongoing.
Unloading of waste on asphalt	Plant grounds away from storm drains	▪ Spill kits are accessible and available	✓	Ongoing.
Vehicle Washing	outside	▪ Ensure that any runoff from outside washing area is diverted to treatment area	✓	Ongoing.