STORMWATER POLLUTION PREVENTION PLAN

TOWN OF CANTON PUBLIC WORKS GARAGE AND WATER POLLUTION CONTROL FACILITY 50 OLD RIVER ROAD CANTON, CONNECTICUT

June 25, 2014

MMI #1752-24-1

Prepared for:

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1.0 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been developed for the Town of Canton (the Town) Public Works Garage and Water Pollution Control Facility (WPCF) in accordance with the requirements of the General Permit for the Discharge of Stormwater Associated with an Industrial Activity, which went into effect on October 1, 2011 (the General Permit). A copy of the General Permit is in Appendix A. Milone & MacBroom, Inc. (MMI) has been retained by the Town to prepare this registration and SWPPP. The Town's Public Works Garage and WPCF are located on one property on Old River Road in the Collinsville section of Canton. This SWPPP covers activities associated with both facilities. Site usage can be characterized under the primary Department of Energy & Environmental Protection (CT DEEP) Sector Code G – Transportation and Public Works. The WPCF falls under Sector Code T; however, its design flow is less than 1.0 million gallons per day (MGD) and so does not require its own SWPPP.

Information contained in this SWPPP has been obtained from site inspections, facility records, and communications with municipal personnel. A copy of this plan shall be maintained at the site as required by Section 5(c)(1)(A) of the General Permit. An electronic copy of the plan shall also be placed on the Town's website (http://www.townofcantonct.org) under the Public Works Department.

2.0 SITE DESCRIPTION

2.1 General Description and Current Uses

The Public Works Garage and Canton WPCF are located on a 6.5-acre parcel at 50 Old River Road.

The facility at #50 Old River Road serves as the base of operations for the Town's Highway Division and Parks Division. The Public Works Department maintains most of Canton's infrastructure, including Town streets, curbing, paving, street sweeping, snow removal, road sanding, ice control, storm cleanup, brush cutting, pothole repair, and cleaning and repairing catch basins and sanitary sewers. The subject facility is utilized by the eight-employee Highway Division and three-employee Parks Division. The Public Works Department also manages and maintains all Town parks as well as the Transfer Station. The Transfer Station is the subject of a separate permit registration and SWPPP.

Activities at the Public Works site include the maintenance of the Town's equipment and vehicles, storage of sand and salt for deicing operations, and fueling station for Town vehicles. The Town's WPCF is located on the same parcel as the Public Works facility. The WPCF was upgraded in the 1990s and operates under an existing CT DEEP National Pollutant Discharge Elimination System (NPDES) permit for a design flow of 0.950 MGD. All activities and material storage at the WPCF are conducted indoors, and there is no exposure to rainfall.

The stormwater permit related activities that take place at the property and that are subject to the conditions of this SWPPP and general permit are limited to the Public Works facility and include:

- Sand/salt storage
- Diesel and gasoline fueling for Town vehicles
- Vehicle maintenance and storage

The parcel is bordered by Old River Road to the north, River Road (aka Route 179) to the east, the Farmington River to the west, and by Town park land to the south. The Collinsville Fire Department and Police Department are located across River Road from the parcel, on the east side of River Road. The remaining surrounding parcels are residential in use. Figure 2-1 is an aerial location map of the facility.

The parcel is located within the Farmington River Main Stem watershed, and the Farmington River is located along the western boundary of the site. There is no stormwater collection infrastructure on site, with surface runoff discharging through infiltration. An infiltration ditch located along the eastern property line collects surface runoff from the River Road western slope and the parcels located to the north. Information from Town staff indicates that the ditch contains water only after snowmelt and in the spring months. It generally remains dry during the remainder of the year. Drainage areas and potential pollutants are detailed in Section 3.0 of this plan.

2.2 Applicable Standard Industrial Classification (SIC) Codes

The primary industrial activity at the facility is classified under the primary Standard Industrial Classification (SIC) Code 9199 Public Works Garage and the North American Industrial Classification System Code 92119. Operations at the facility are categorized under Sector G – Transportation and Public Works.

2.3 Site Description

The subject activity occurs at two facilities located on the same Town-owned parcels at #50 Old River Road. Approximately 28 percent of the site is lawn, with the Town's Bicentennial Little League field separating the operations at the Public Works facility and the WPCF. The first phase of the Farmington River greenway skirts the edge of the parcel and is separated from Town operations at the WPCF by a chain link fence and from the Public Works building by a split rail fence.

Public Works Building

The Public Works building is an approximately 4,650-square-foot building that has been expanded from a historical barn. The building serves as the central location for maintenance, repair, fueling, and storage of Town vehicles. This includes changing tires and oil. The building consists of an office, a "ready room" for seasonal supplies and equipment repairs, a loft used for storage of spare tires, and a dirt floor "barn" bay in the historical section of the



structure. There are no floor drains in any part of the structure. The ready room contains two 350-gallon aboveground fuel oil tanks for heating. All hydraulic oil, diesel oil, and miscellaneous vehicle fluids are stored inside. The pesticide cabinet located inside the barn bay contains primarily Roundup® products. A summary of all materials and liquids stored in the building can be found in Appendix C.

The Public Works facility is located in a historical barn that withstood the 1955 flooding. The building is in fair condition. The concrete floors are deteriorating in some locations, and the southwest corner of the building shows evidence of structural failure. Overall, the facility is aged and in need of upgrade.

The ground surrounding the Public Works building is comprised of hard-compacted gravel and dirt, encompassing approximately 1.4 acres of the site. A permanent salt storage structure is located to the southeast of the garage building, with a concrete block wall base structure and wood-slatted walls and roof. A large sand and gravel stockpile area is located directly north of the salt storage shed. A 24" reinforced concrete pipe culvert has been installed under the pile to convey the intermittent watercourse along the property's eastern boundary.

The eastern portion of the site is utilized for the storage of various Town-owned vehicles and materials including plow attachments and a material storage area used for seasonal needs (i.e., clay, wood mulch, sand/salt for residents).

A diesel and unleaded gasoline fueling station is located at the southern end of the Public Works portion of the parcel. Both fuels are stored in double-lined aboveground 2,000-gallon ConVault tanks and protected by bollards. There is no roof over the fueling area.

Water Pollution Control Facility

All operations and material storage at the WPCF are conducted inside and under cover. No exposure of any industrial material to rainwater was observed at this portion of the site. The facility consists of five buildings and tanks associated with the wastewater treatment processes. A diesel generator provides backup power. The fuel tank for the backup generator is a 500-gallon aboveground ConVault concrete-encased storage tank. Paved/impervious areas are estimated to cover approximately 1.1 acres in this area of operations.

2.4 Stormwater Conveyance Structures

The site contains no stormwater conveyance infrastructure, with site runoff discharging to a low point in the center of the site and infiltrating. A very narrow portion of the site may drain into the infiltration ditch that collects surface runoff from the River Road embankment, but the majority of the parcel along this ditch has been bermed to redirect drainage toward the central lawn area. The western portion of the site, adjacent to the bike trail, also sheet flows to the center of the site. Roof leaders at the WPCF are directed to stone outfalls at the base of the gutter. Therefore, the site has no direct discharge points.

2.5 Environmental Setting

The CT DEEP December 2013 Natural Diversity Database (NDDB) was accessed to determine whether state-listed special concern, threatened, and/or endangered species occur within the project limits. According to the database, the parcel is located within an area of concern. An NDDB application was submitted to the CT DEEP for review. A review by the DEEP Bureau of Natural Resources determined that the existing activities will have no detrimental effects on the identified species within the vicinity of the site. The identified species of special concern include the wood turtle (*Glyptemys insculpta*) and the eastern box turtle (*Terrapene carolina Carolina*). See Attachment C of the permit application package for NDDB correspondence. The CT DEEP also stocks the Farmington River with trout annually from a location on state property just south of the WPCF.

The parcel is not located in an Aquifer Protection Zone or any public water supply watersheds. The site is located outside of the Coastal Consistency Review Boundary.

The entirety of the facility is located within the Federal Emergency Management Agency (FEMA) delineated 1% (Zone AE) and 0.2% annual chance flood zones with base elevations determined. The western portion of the parcel is also located within the floodway of the Farmington River. Per the Hartford County Flood Insurance Study (effective date September 16, 2011), the base flood elevation of the Farmington River at this parcel is 297.5 feet (NAVD88). The low spot near the baseball field, as shown on the appended site mapping, is at elevation 293.9 feet (NGVD29), and the Department of Public Works (DPW) Garage is at elevation 298 feet (NGVD29). The conversion factor to NGVD29 is +0.81 foot, making the NAVD88 elevations at the baseball field and DPW Garage 293.09 feet and 297.19 feet, respectively. The limits of these floodplain areas are shown on the appended site plan.

3.0 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

In accordance with Section 5.(f).7 (Sector G) of the General Permit, Table 3-1 is a summary of sources and activities that have the potential to contribute pollutants to stormwater runoff. The table also notes management practices and controls in accordance with the requirements of the permit. Because the site is characterized as Sector G, potential additional pollutant sources must be inventoried. These include evaluations of potential:

- On-site waste storage or disposal
- Dirt/gravel parking areas for vehicles awaiting maintenance
- Illicit plumbing connections between interior floor drains and the stormwater conveyance systems
- Direct injection of stormwater via an existing drywell

The appended site plan indicates the location of potential sources of pollution based on the activities that are currently carried out by the Town at the facility. A total of four primary drainage areas were identified at the site. The largest area, and the one that represents all of the potential stormwater exposure, is associated with the Public Works Garage. The narrow areas along the eastern and western limits of the site have not been detailed as a watershed area as they do not contain any site operations or stormwater conveyance structures, discharging via overland flow directly to either the River Road infiltration ditch or the Farmington River.

TABLE 3-1 Summary of Exposed Materials/Areas

Exposed Materials	Method of Storage	Management Practices	Controls	Potential Pollutants of Concern*	Drainage Area
Topsoil / Construction Material Storage	Stockpile	None	Concrete block dividing walls, silt fence to be installed near unwalled storage area	TSS, TP, TKN, NO3-N	DA-001
Road Salt	Stockpile	Covered in shed (some leakage occurring)	Shed and foundation walls to be repaired	TSS, Cl	DA-001
General Refuse Dumpster	Close-topped dumpsters	Covered at the end of each operating day; inspections	Permanent cover	O&G, COD, TSS, Cu, Zn, Pb	DA-002
Vehicle Storage	Parked outside	Regular preventative maintenance; inspections	None	O&G	DA-001
Fueling Areas	Aboveground tanks	Regular preventative maintenance; inspections	Double-walled tank; spill containment	O&G	DA-001

Zn = Zinc

*Note: O&G = Oil and Grease

COD = Chemical Oxygen Demand

TSS = Total Suspended Solids

TP = Total Phosphorous

NO3-N = Nitrate-Nitrogen Mg = Magnesium Cu = Copper

TKN = Total Kjeldahl Nitrogen

Pb = Lead Cl = Chloride

3.1 Drainage Area 001

DA-001 consists of the watershed area that discharges to a low point near the baseball field and infiltrates. Sheet flow from the gravel/dirt driveway and storage area and a large portion of the grassed area south of the Public Works facility flows overland and ponds until it infiltrates. There is no direct discharge point from this drainage area.

Operations in this area include plow attachment storage, vehicle fueling station, vehicle parking, seasonal material storage, and the salt storage shed. The watershed area to the stormwater conveyance system includes the ConVault-type double-walled, aboveground storage tanks and refueling area. The tanks have an integral secondary containment structure and are equipped with overfill protection devices. The tanks are protected against accidental vehicle damage with a series of bollards. The refueling area is currently not covered with any type of roof structure. Potential pollutants include oil and grease, metals, chloride, and suspended solids.

During a May 2014 site visit, the salt storage shed was observed to be in poor condition, and some leakage of material from corners was occurring. The sand and gravel stockpile is located adjacent to the infiltration ditch. A berm along the edge of the ditch is recommended to prohibit sand and salt from washing into the ditch.

Two spill containment kits are located at the Public Works Garage to contain any small fuel or material spills, and a professional company (Clean Harbors) will be called should any larger spills occur.

3.2 <u>Drainage Area 002</u>

DA-002 consists of the southern portion of the facility, encompassing approximately half of the WPCF. There is no installed stormwater conveyance system, with all runoff being overland flow. The drainage area includes most of the paved site, the WPCF buildings, and the lawn area to the east of the facility. Overland runoff discharges to the River Road infiltration ditch and into Rattlesnake Brook. All materials associated with WPCF operations are stored inside the buildings and are not exposed to stormwater. A small general refuse dumpster remains covered.

3.3 Drainage Area 003

DA-003 consists of the western portions of the paved WPCF facility and bike trail that drain to the west, discharging down the wooded slope overland to the Farmington River. There are no stormwater conveyance structures in this watershed, and all materials are stored inside.

3.4 Drainage Area 004

DA-004 consists of the watershed that drains the southern portion of the grassed site overland to Rattlesnake Brook. No facility operations are conducted in this area, and there are no stormwater conveyance structures in this watershed.

3.5 Inventory of Exposed Materials and Potential Pollutant Sources

In accordance with Section 5(c)(2)(D)(ii) of the General Permit - Inventory of Exposed Materials, the following sections provide a summary of specific activities that have the potential to impact stormwater quality.

Fertilizer, Herbicide, and Pesticide Application

The Town does not apply any of these materials at the complex and, as such, they do not pose a potential pollutant risk. Storage of any of these materials is within a watertight storage container inside the Public Works Garage.

Earth and Soil Moving

The Town utilizes a portion of the site for temporary storage of construction materials such as stone, topsoil, and clean fill. These materials are stored in the area to the east of the Highway garage.

Waste Hauling and Loading or Unloading

Loading/unloading operations at the site are limited to the removal of waste from the dumpster located adjacent to the WPCF. Potential pollutant sources include refuse and any liquid contained in the refuse. The general waste dumpster is equipped with a lid that remains closed.

Roof Areas

Activities at the buildings do not have process vents that would discharge to the roof and become potential stormwater contaminants.

Outdoor Storage Activities (Dumpsters, Equipment, and Leaf/Yard Waste)

The Town stores seasonal materials at the Public Works Garage that include clay, wood mulch, and sand/salt for residents. These materials are contained within concrete block walls and are located on the packed gravel driveway.

Outdoor Manufacturing or Processing Activities

There are no outdoor manufacturing or processing activities at either facility.

Dust- or Particulate-Generating Processes

Storage of construction materials (sand/gravel) near the salt storage shed has the potential to generate dust and/or particulates. The Town's sand and salt storage operations are located within a covered structure.

On-Site Waste Disposal Practices

There is no active on-site solid waste disposal of goods with the exception of wood-chipping operations. Small stockpile areas of wood chips are stored within concrete block walls adjacent to the Public Works Garage.

Failure or Leaks From Leachate Collection and Treatment Systems

No leachate collection systems are present at the site.

3.6 Spills and Leaks

There have been no recorded spills or leaks of five gallons or more of toxic or hazardous substances at the facility that could affect stormwater. Any spills or leaks of five gallons or more will be recorded on site using the form provided in Appendix C of this plan.

4.0 MEASURES AND CONTROLS

The following stormwater management controls are in place for the operations at the facility. In addition to the control measures specified in "Control Measures" [Section 5(b)] of the General Permit, the following include the additional control measures as per sector-specific requirements.

4.1 Pollution Prevention Team

The Pollution Prevention Team is responsible for implementing the SWPPP, ensuring compliance with regulatory requirements and providing acceptable environmental quality of the site and of the stormwater discharges. A number of Town employees will have primary responsibility for the implementation of the SWPPP.

Pollution Prevention Coordinator:

Mr. Robert Martin, Director of Public Works Town of Canton 4 Market Street Canton, Connecticut 06022 (860) 693-7863

 Responsibilities: Coordinate all stages of SWPPP development and implementation; submit budget requests sufficient for proper site operation and maintenance; establish staff responsibilities and job duties and delegate them appropriately; establish and implement training programs as appropriate; maintain records and ensure regulatory reports are submitted as required; coordinate quarterly visual sampling; periodically update the SWPPP as necessary.

Members:

Mr. George Wallace, P.E., Project Administrator (860) 693-7855

- Responsibilities: Assist Pollution Prevention Coordinator in operations described above. Mr. Rick Lassen, Foreman, Highway Division (860) 693-7863
- Responsibilities: Assist Pollution Prevention Coordinator in operations described above.

Roger Ignazio Jr., Superintendent of Canton WPCF (860) 693-7867

• Responsibilities: Oversee the implementation of preventive maintenance and "good housekeeping" at the WPCF; respond to emergency situations; spill response coordinator

The SWPPP will be updated by the Pollution Prevention Coordinator whenever (1) there is a change at the site that has an effect on the potential to cause pollution of the waters of the state; or (2) the actions required by the plan fail to ensure or adequately protect against pollution of the waters of the state. The required SWPPP certifications are included herein as Appendix D.

4.2 Good Housekeeping/Preventive Maintenance

Proper housekeeping will be practiced at the facility to prevent inadvertent discharges to the stormwater system. No washing of equipment or vehicles is conducted on site. Any fluids or materials incorporated in vehicle maintenance should be collected with sorbent materials.

The Town will maintain the integrity and effectiveness of all collection containers, waste material storage areas, and systems to contain pollutants and minimize exposure to rainfall and

runoff. In addition to the placement of erosion controls as described below, the following preventive maintenance should be completed as necessary based on the results of site inspections as part of the preventive maintenance program:

- Inspect the perimeter banks of the site at the River Road infiltration ditch, Rattlesnake Brook, and the Farmington River for erosion.
- Place all sand and salt stockpiles inside the salt storage shed and repair the shed to prohibit spillage of material.
- Inspect the aboveground diesel and gasoline tanks for signs of leakage or cracking.
- Use drip pans when performing maintenance on vehicles.
- Perform all fluid changes inside the garage, consistent with current practice.
- Immediately clean spills with absorbent material. Speedi-dri or other similar sorbent material will be kept on site for spill cleanup. Used or "spent" Speedi-dri will be stored in 55-gallon drums until it can be properly disposed of off site. Spills will be cleaned up in accordance with the procedures outlined in this plan.
- Use funnels to minimize leaks and spills when transferring fluids.
- Keep oily wastes separate from other waste materials.
- Store dirty rags in a covered container.
- Do not store any drums outdoors.

The primary areas for potential release of pollutants to stormwater include the refueling area and the bulk salt storage area. Both motor fuel storage tanks are above grade, with secondary containment integral to the design of the tank. The filling stations are equipped with an automatic shutoff to prevent potential overtopping of vehicle gas tanks. The storage shed protects the stockpile from rainwater but is in poor condition and should be repaired or replaced in the near future.

A berm should be constructed along the River Road infiltration ditch to prohibit potential runoff of sand and salt stored in stockpiles adjacent to the ditch.

A berm should be constructed along the western garage bay opening (facing the Farmington River) to prevent any spill from discharging from the maintenance garage.

These changes have been noted on the appended Site Plan.

The fuel filling stations will continue to be a potential pollution source area. However, since the tanks are relatively new and contain an automatic shutoff mechanism to minimize the potential for overfills, the potential for release from these tanks has been minimized. They do need to be covered and, ideally, fueling of vehicles should occur on impervious surface rather than gravel to prevent groundwater contamination in the event of a fuel spill.

No other chemicals and materials were observed to be stored outside at the site.

4.3 Vehicle and Equipment Washing

No vehicle and equipment washing is conducted at this facility.

4.4 Roof Areas

No roof areas were identified during the site inspections as being exposed to chemical or other pollutants. As such, preventative maintenance items are not necessary to prevent nonstormwater-related discharges.

4.5 Sediment and Erosion Controls

Erosion and sedimentation controls shall be installed in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. These controls will be installed and maintained to protect the waters of the state. Additional recommendations have been included in Section 5.0 of this SWPPP. As site conditions may change, inspections that reveal potential erosion will be addressed by implementing additional measures to limit stormwater impacts. Maintenance activities will be performed as needed based on visual inspection by the SWPPP team.

Some operations at the site have the potential to generate dust/particulates. Soil and material stockpiling along the perimeter of the facility shall be addressed with the installation of silt fence or other sediment control measures around the stockpiles.

4.6 Spill Prevention and Response Procedures

Potential spill areas include the Highway Garage, the fueling stations and aboveground fuel storage tanks, and the salt storage shed that is currently in poor condition. In the event of an accidental discharge of chemical material, the Pollution Prevention Coordinator will be notified immediately to coordinate response procedures. The Pollution Prevention Coordinator will be notified of releases regardless of spill quantity. If the spill represents an immediate health or explosion hazard, the Canton Fire Department will be contacted immediately by dialing 911. The spill will also be reported to the CT DEEP Oil and Chemical Spills Unit at (860) 424-3338. A spill response record form is presented in Appendix B.

Containment of the spill will begin immediately using available manpower and materials. Sorbent material will be clearly marked and available at all potential spill locations. The spill will be contained as close to the source as possible with absorbent materials. These materials will be removed immediately and disposed of in a proper manner. Expended sorbent and its associated fluid will be removed and placed into a sorbent disposal drum. The waste drum will be located in an appropriate disposal area and removed to a qualified facility for proper treatment. In the event that containment of the spill is beyond the capability of the available manpower, the nearest available cleanup contractor will be notified.

4.6.1 <u>Fueling Area Spill Prevention</u>

The fueling area should be equipped with readily accessible spill containment and control measures to prevent the possibility of petroleum hydrocarbons from entering the stormwater system. A spill kit consisting of adsorbent material should be provided near the fueling station.

4.6.2 <u>Spill Response Procedures</u>

The Pollution Prevention Coordinator or his designee will be responsible for contacting the CT DEEP as well as local emergency management officials as required. A listing of Town personnel and a state, local, and federal official who must be contacted in case of an emergency is included in Table 4-1.

TABLE 4-1 Emergency Contact Information

Town Agency	Contact Information
Emergency-Medical-Fire-Police	911
Canton Fire Marshal	(860) 693-7857
Canton Police Department (Nonemergency)	(860) 693-0221
Area Health District (Farmington Valley)	(860) 352-2333
Canton Department of Public Works	(860) 693-7863
CT DEEP Emergency Response and Spill Prevention	(860) 424-3338
CT DEEP Waste Management	(860) 424-3366
CT DEEP Water Management	(860) 424-3914
State Office of Emergency Medical Services	(860) 509-7975
State Fire Marshal/Bureau of Engineering	(860) 685-8350

4.7 **Employee Training**

Employees will be trained regarding the safe and appropriate handling of materials that are used on site as well as appropriate stormwater management techniques. The Pollution Prevention Coordinator or his designee will train new employees within 90 days of hire. A log will be kept to verify that training has occurred.

Employees will receive training on this SWPPP, including its contents and recommendations. Training will include information on the importance of good stormwater management practices, spill response procedures, and material management practices. The importance of preventing nonstormwater discharges will be discussed during training. Employees will also be taught good housekeeping and preventive maintenance practices. The spill prevention and response procedures will be reviewed such that each employee is familiar with the required practices in the event of a material spill.

4.8 Nonstormwater Discharges

The General Permit identifies allowable nonstormwater discharges. These discharges are allowed provided they do not impact water quality. Allowable nonstormwater discharges include the following:

- → Landscape irrigation and lawn watering runoff
- → Uncontaminated groundwater discharges such as from foundation drains and footing drains; residual street washwater
- → Discharges containing no chemical additives (including chlorine) from flushing fire systems
- → Naturally occurring discharges such as rising groundwater and springs

Based on a review of operations and observation of the site during the May 2014 site walk, it appears that there are no unallowable stormwater discharges.

5.0 RECOMMENDATIONS FOR STORMWATER MANAGEMENT

MMI identified a number of improvements that must be made, each intended to protect stormwater at this site during the May 2014 site visit. Many of these are depicted on the Appended Site Plan. Engineering details of each of these improvements need to be evaluated in detail prior to implementation. The cost of the proposed improvements should be incorporated into a five-year capital improvement program, with the goal of completing construction of the improvements by the end of 2019.

1. First and foremost in our opinion, the town should work to relocate the Public Works facility. The structure is failing and in fair condition at best. It is outdated and does not sufficiently support current operations. Most importantly, its presence in the floodplain of the Farmington River leads to the potential for significant water quality impacts during flood events and also hinders the ability of the Public Works staff to assist the community during flood events. This option will be addressed via referendum in the coming year.

The remaining recommendations pertain to the current site and should be implemented as soon as possible, even if the referendum passes.

- 2. A berm/lip should be installed along the western garage bay opening (facing the Farmington River) to prevent any spills from exiting the garage.
- 3. Provide a roof structure over the existing filling station and/or provide spill prevention kits readily accessible at the station.
- 4. Promote growth of a vegetated buffer or construct a berm along the eastern slope to separate the material stockpile and salt storage from the River Road infiltration ditch.
- 5. Silt fence or approved equivalent shall be provided around all stockpiled materials/storage areas. Stockpiles that are in place for longer than 30 days should be vegetated as soon as possible.

6. Repair the existing salt storage shed so that accidental spillage or collapse does not occur.

6.0 MONITORING PROGRAM

The General Permit requires a standard monitoring program for registrants; however, certain sectors require a more detailed program given the sensitivity of the site usage. The permittee will comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur and where waste is exposed or potentially exposed to rainfall.

Two types of ongoing site inspections will be performed. The first is periodic inspection of select areas. The second is a comprehensive site compliance evaluation. Site inspections will be completed by the Pollution Prevention Coordinator or his designee. Monitoring consists of site inspections, outfall inspections, and water quality sampling.

The Town will maintain a site operating log. The logs will include records of date received, source of material, and designated storage. Up-to-date records of the facility operations will be maintained on site.

6.1 <u>Site Inspections</u>

6.1.1 Monthly Inspections

Monthly inspections must be completed and shall include the visual inspection of all equipment and specific sensitive areas of the site. The evaluation should include a visual inspection of work areas, with particular emphasis on storage of materials or equipment in areas that may be exposed to rainwater. Records shall be kept on site that detail tracking or follow-up procedures. Other information that may be appropriate for record keeping includes:

- Maintenance performed
- Observations of incidental site inspections
- Emergency conditions (spills, failures, etc.)
 - Time initiated and/or first detected
 - Nature of emergency
 - Effects on receiving stream
 - Corrective action taken
 - Authorities notified
 - Duration
 - Special sampling and results
 - Other pertinent documentation

6.1.2 Semiannual Inspections

The Town shall conduct comprehensive site inspections twice a year. Inspections should be made during rainfall events if possible. Such evaluations shall include:

- → Visual inspection of material handling areas and other potential sources of pollution identified in the plan for evidence of, or the potential for, pollutants entering the stormwater drainage system
- → Visual inspection of erosion control measures
- → Visual inspection of spill response equipment
- → Visual inspection of all storage tanks (unleaded gasoline and diesel)

Records shall be kept of all site inspections that summarize the scope of the inspection, personnel making the inspection, signature of the permittee, the date(s) of the inspection, major observations relating to the plan, corrective actions taken, and updates made to the plan. All records shall be retained as part of the SWPPP for at least 5 years. A sample inspection form is included herein as Appendix E.

No emergencies have been reported at the site to date. If an emergency condition were to arise, records would be kept to properly report the incident to the appropriate parties and to provide a means of dealing with similar conditions in the future. If the emergency caused a violation of the General Permit, the DEEP would be notified. Any accelerated stormwater sampling or other information required to fully document and describe the condition would also be recorded.

6.2 Outfall Monitoring

The site walk completed in May 2014 revealed no apparent visual indicators of runoff from the site (i.e., leaf litter, etc.). The only apparent stormwater flow direction was from the gravel area adjacent to the WPCF into the grassed field to the south. The Town staff indicated that the site's stormwater infiltrates within the lawn area located at the center of the site. The berm to be constructed along the edge of the River Road infiltration ditch will preclude any runoff from discharging to the ditch. Given the conditions at the site, there is no point discharge and, therefore, sampling cannot be completed unless conditions change such that a discharge does occur. Should the Town not install the berm along the ditch, sampling may need to be completed in accordance with the General Permit.

6.2.1 Quarterly Monitoring

Visual monitoring of outfalls is required by the General Permit on a quarterly basis. For monitoring purposes, quarters begin on January 1, April 1, July 1, and October 1. In accordance with the General Permit, the Town shall submit Stormwater Monitoring Reports (SMRs) for each quarterly sampling period with the words "No Discharge" unless conditions change such that a discharge does occur.

If the berm along the infiltration ditch is not constructed, the ditch may constitute a discharge from the site and will need to be sampled. Water quality samples shall be taken from the ditch at its outlet to Rattlesnake Brook should sufficient rainfall cause runoff rather than infiltration as seen historically. A Quarterly Visual Monitoring Form and Instructions are

provided in Appendix E. Table 6-1 summarizes the visual monitoring parameters that must be evaluated on a quarterly basis:

TABLE 6-1
Quarterly Visual Monitoring Parameters

Parameter
Color (visual)
Odor
Clarity
Floating solids
Settled solids
Suspended solids
Foam
Oil sheen
Obvious indicators of stormwater pollution

6.2.2 <u>Semiannual Monitoring</u>

In addition to the standard monitoring required in "Monitoring" [Section 5(*e*) of the General Permit], for the given sector uses of the project site, the Town is required to sample additional parameters under the same conditions as those required in Section 5(*e*). One semiannual sample shall be taken between October 1 and March 31, and the other shall be taken between April 1 and September 30. Semiannual samples shall be separated by at least 30 days. Given the lack of discharge from the site, the Town shall submit SMRs for each semiannual period with the words "No Discharge" unless conditions change such that a discharge does occur.

If the berm along the infiltration ditch is not constructed, the ditch may constitute a discharge from the site and will need to be sampled. Water quality samples shall be taken from the ditch at its outlet to Rattlesnake Brook should sufficient rainfall cause runoff rather than infiltration as seen historically. Table 6-2 summarizes all parameters that must be evaluated on a semiannual basis:

TABLE 6-2 Semiannual Monitoring Parameters

Parameter	Benchmark
Chemical Oxygen Demand (mg/l)	75
Total Oil and Grease (mg/l)	5
Sample pH (S.U.)	5-9
Rainfall pH (S.U.)	
Total Suspended Solids (mg/l)	90
Total Phosphorous (mg/l)	0.40
Total Kjeldahl Nitrogen (mg/l)	2.30
Nitrate as Nitrogen (mg/l)	1.10
Total Copper (mg/l)	0.059
Total Lead (mg/l)	0.076
Total Zinc (mg/l)	0.160
Aquatic Toxicity	Years 1 and 2
	(see Section 6.2.3)

mg/l = milligrams per Liter

6.2.3 Annual Monitoring

Annual monitoring for aquatic toxicity is required for stormwater discharge from a site and must be completed during the first 2 years following the date of authorization. As it is typically included in a regularly scheduled semiannual sample, the same "No Discharge" notation will be submitted to the CT DEEP on the required SMRs as long as the berm along the ditch is constructed.

The CT DEEP Impaired Waters Monitoring Requirements Table does not identify Drainage Basin CT 4300-00_04 of the Farmington River as being impaired. Therefore, no additional annual sampling is required.

1752-24-1-jn2414-rpt

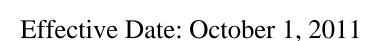
APPENDIX A General Permit for the Discharge of Stormwater Associated With Industrial Activities

Public Works Garage and WPCF Canton, Connecticut



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE WATER PERMITTING AND ENFORCEMENT DIVISION (860) 424-3018

General Permit for the Discharge of Stormwater Associated with Industrial Activity



General Permit for the Discharge of Stormwater Associated with Industrial Activities

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Appendix A: Industrial Stormwater General Permit SIC Code Definitions

Appendix B: Industrial Stormwater Monitoring Guidance

Appendix C: Aquifer Protection Areas and Other Groundwater Drinking Supply Areas Guidance

General Permit for the Discharge of Stormwater Associated with Industrial Activity

Section 1. Authority

This general permit is issued under the authority of section 22a-430b of the Connecticut General Statutes.

Section 2. Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in sections 22a-423 and 22a-207 of the Connecticut General Statutes and section 22a-430-3(a) of the Regulations of State Agencies. As used in this general permit, the following definitions shall apply:

"25-year, 24-hour rainfall event" means the maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

"100-year, 24-hour rainfall event" means the maximum 24-hour precipitation event with a probable recurrence interval of once in 100 years, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

"Agricultural wastes" means organic materials normally associated with the production and processing of food and fiber on farms, feedlots and forests. Such wastes may include, but are not limited to, manures, bedding materials, spilled feed or feed waste, and crop residues.

"Aquifer protection area" means aquifer protection area as defined in section 22a-354h of the Connecticut General Statutes.

"Authorized activity" means any activity authorized under this general permit.

"Benchmark" means a standard by which stormwater discharge quality is measured as identified in section 5(e)(1)(B) of this permit.

"Coastal area" shall be the same as the definition contained in section 22a-94 of the Connecticut General Statutes.

"Coastal waters" shall be the same as the definition contained in section 22a-93(5) of the Connecticut General Statutes.

"Commissioner" means the commissioner as defined by section 22a-2(b) of the Connecticut General Statutes.

"Compost" means the product of composting.

"Composting" means the process of accelerated aerobic biodegradation and stabilization of organic material under controlled conditions that results in a finished product called compost.

"Department" means the department of environmental protection.

"Fresh-tidal wetland" means a tidal wetland with an average salinity of less than 0.5 parts per thousand.

"Grab sample" means an individual sample collected in less than fifteen (15) minutes.

"Guidelines" means the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, or as may be amended, established pursuant to section 22a-328 of the Connecticut General Statutes.

"High tide line" shall be the same as that contained in section 22a-359(c) of the Connecticut General Statutes.

"Impaired waters" means those surface waters of the state designated by the commissioner as impaired pursuant to Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report.

"Individual permit" means a permit issued to a named permittee under section 22a-430 of the Connecticut General Statutes.

"Industrial activity" means any activity listed below with primary Standard Industrial Classification (SIC) codes as identified by "Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget 1987" or a primary activity described in narrative form below:

- (1) An activity subject to stormwater effluent limitation guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N as included in this general permit;
- (2) An activity classified as Standard Industrial Classification 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441 and 373;
- (3) An activity classified as Standard Industrial Classification 10 through 14 (mining industry) including active or inactive mining operations that are not stabilized; or oil and gas exploration, production, processing, or treatment operations; or transmission facilities that discharge stormwater that has come into contact with any overburden, raw material, intermediate products, finished products, by-products or waste products;
- (4) Hazardous waste treatment, storage, or disposal facilities, including those facilities operating under interim status or a permit pursuant to section 22a-449(c) or 22a-454 of the Connecticut General Statutes; or hazardous waste transportation activities conducted pursuant to these statutes;
- (5) Recycling centers, resource recovery facilities and all such facilities and centers as defined in section 22a-207 of the Connecticut General Statutes, including facilities classified as Standard Industrial Classification 4953; solid waste facilities (where waste and/or leachate are exposed or potentially exposed to rainfall); intermediate processing facilities; or facilities that are subject to regulation under Subtitle D of the Resource Conservation and Recovery Act, 42 U.S.C. sections 6901, *et seq*;
- (6) Facilities involved in the recycling (including assembling, breaking up, sorting and wholesale or retail distribution) of materials including metal scrap yards, battery reclaimers, salvage yards, and automobile junk yards, or those facilities classified as Standard Industrial Classification 5015 and 5093;

- (7) Steam electric power generating facilities classified as Standard Industrial Classification 4911, including coal-handling sites for these facilities;
- (8) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 44, 45 or retail truck stops (within SIC 5541) that have maintenance or fueling operations. Also included in this definition are vehicle service and storage facilities (including, but not limited to, public works garages) operated by federal, state or municipal government which have vehicle maintenance or repair shops, equipment cleaning, fueling or maintenance operations, road salt storage, or airport deicing operations. Also included in this definition are yacht clubs (within SIC 7997) or boat dealers (SIC 5551) that have onsite engine service or repair, vehicle or equipment cleaning, painting operations, hull maintenance and repair (including, but not limited to, sanding, chemical stripping and painting) or fueling operations;
- (9) Treatment works with a design capacity of greater than one million gallons per day (1 MGD) treating domestic sewage (or any other sewage sludge or wastewater treatment device or system) used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that is located within the confines of the facility. This definition does not include farm lands; domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility; or areas that are in compliance with 40 CFR 503;
- (10) An activity classified as Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221 25, (provided the activity is not otherwise included within categories (2) through (9), (11) or (12)), and has material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products or industrial machinery exposed to stormwater;
- (11) Facilities classified as Standard Industrial Classification 5171 (Petroleum Bulk Stations and Terminals);
- (12) Road salt and deicing material storage facilities, including facilities storing pure salt or other deicing materials or deicing materials mixed with other materials;
- (13) Wood processing facilities not otherwise described under this subsection, including but not limited to, mulching, chipping, and mulch coloring for retail or wholesale;
- (14) Small-scale composting facilities (as defined in this section) where composting is the primary activity, business, or purpose of the facility..

"Inland wetland" means wetlands as that term is defined in section 22a-38 of the Connecticut General Statutes.

"Intermediate processing facility" means a facility where glass, metals, paper products, batteries, household hazardous waste, fertilizers and other items are removed from the waste stream for recycling or reuse.

"Minimize", for purposes of implementing control measures in Section 5(b) of this general permit, means reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

- "Municipal separate storm sewer system" or "MS4" means conveyances for stormwater (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or operated by any municipality and discharging to surface waters of the state.
- "Municipality" means a city, town or borough of the state.
- "Permittee" means any person who or municipality which initiates, creates, originates or maintains a discharge in accordance with Section 3 of this general permit.
- "Person" means person as defined by section 22a-2(c) of the Connecticut General Statutes.
- "Point Source" means any discernible, confined and discrete conveyance (including but not limited to, any pipe, ditch, channel, tunnel, conduit, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft) from which pollutants are or may be discharged.
- "Qualified Person or Qualified Personnel", for purposes of inspections and training, means any person familiar with the content, requirements and objectives of this permit and the facility's Stormwater Pollution Prevention Plan.
- "Recycling facility" or "recycling center" means land and appurtenances thereon and structures where recycling is conducted, including but not limited to, an intermediate processing facility as defined above.
- "Registrant" means a person who or municipality which files a registration pursuant to Section 4 of this general permit.
- "Registration" means a registration form filed with the commissioner pursuant to Section 4 of this general permit.
- "Regulated Small Municipal Separate Storm Sewer System (MS4)" means any municipally-owned or -operated municipal separate storm sewer (as defined above) system authorized by the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 general permit) including all those located partially or entirely within an Urbanized Area and those additional municipally-owned or municipally-operated Small MS4s located outside an Urbanized Area as may be designated by the commissioner.
- "Retain" means to hold runoff on-site with no subsequent point source release to surface waters from a storm event defined in this general permit or as approved by the commissioner.
- "Sediment" means solid material, either mineral or organic, that is in suspension in water, is transported, or has been moved from its site of origin by erosion.
- "Site" means geographically contiguous land on which an authorized activity takes place or on which an activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous land owned by the same person and connected by a right-of-way, which such person controls, and to which the public does not have access, shall be deemed the same site.
- "Small-scale composting facility" means a facility conducting composting, excluding farms composting agricultural wastes integral to the farming operation, that is located on two acres or less, and that processes less than 5,000 cubic yards per year of one or more of the following source separated organic materials, including but not limited to: horse manure and bedding; food scraps

from cafeterias and other food preparation establishments; grocery store organics; food processing residuals; spoiled produce; soiled paper; waxed corrugated cardboard; compostable packaging; and including carbon-based bulking agents such as sawdust, woodchips, and leaves.

"Source separated organic material" or "SSOM" means organic material that is intended to be recycled or composted and has been separated from other solid waste at the point of generation.

"Stormwater" means waters consisting of rainfall runoff, including snow or ice melt during a rain event but not including mine dewatering waters.

"Stormwater discharge associated with industrial activity" means the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or material storage areas at an industrial activity.

"Stormwater Drainage System" means any system that collects and conveys stormwater in a manner resulting in a point source.

"Stormwater Quality Manual" means the Department's 2004 Connecticut Stormwater Quality Manual published by the DEP, as may be amended.

"Tidal wetland" means a wetland as that term is defined in section 22a-29(2) of the Connecticut General Statutes.

"Total Maximum Daily Load" (TMDL) means the maximum capacity of a surface water to assimilate a pollutant as established by the commissioner, including pollutants contributed by point and non-point sources and a margin of safety.

"Vehicle" means a motorized device for transporting persons or things and including without limitation, every type of aircraft, automobile, bus, golf cart, motorcycle, train and truck.

"Water Quality Standards or Classifications" means those water quality standards or classifications contained in the Connecticut Water Quality Standards published by the Department, as may be amended.

Section 3. Authorization Under This General Permit

(a) Eligible Activities

The discharge of stormwater associated with industrial activity (as defined in Section 2) to surface water or to a storm sewer system is authorized by this general permit.

(b) Requirements for Authorization

This general permit authorizes the activity listed in the "Eligible Activities" section (Section 3(a)) of this general permit provided:

(1) The stormwater is discharged from a point source which is directly related to manufacturing, processing or material storage areas at an industrial activity, including but not limited to stormwater discharged from ground surfaces immediately adjacent to manufacturing areas; processing or material storage areas; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401);

composting sites; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and materials remain and are exposed to stormwater.

(2) Coastal Management Act

Such activity must be consistent with all applicable goals and policies in section 22a-92 of the Connecticut General Statutes, and must not cause adverse impacts to coastal resources as defined in section 22a-93(15) of the Connecticut General Statutes.

(3) Aquifer Protection

Such activity, if it is located within an aquifer protection area as mapped under section 22a-354b of the Connecticut General Statutes, must comply with regulations adopted pursuant to section 22a-354i of the Connecticut General Statutes.

(4) Endangered and Threatened Species

Such activity must not threaten the continued existence of any species listed pursuant to section 26-306 of the Connecticut General Statutes as endangered or threatened and must not result in the destruction or adverse modification of habitat designated as essential to such species.

- (5) The stormwater is *not* discharged to a Publicly Owned Treatment Works (POTW).
- (6) The stormwater is *not* discharged entirely to groundwater, meaning that there will be no surface discharge up to a 100-year, 24-hour rainfall event.
- (7) For discharges subject to stormwater effluent limitation guidelines under 40 CFR, Subchapter N, such effluent limitations are identified in Section 5(*f*) of this general permit. Discharges not included in that section are not authorized by this general permit.
- (8) For a stormwater discharge(s) initiated, created or originated after October 1, 1997 discharging within 500 feet of a tidal wetland, which is not a fresh-tidal wetland, the volume of stormwater runoff generated by one inch of rainfall is retained unless the commissioner approves an alternate stormwater management system in accordance with the conditions of Section 5(*a*)(1) of this general permit.

(9) New Discharges to Impaired Waters

For industrial activities of sites constructed after the effective date of this general permit, the activity is not authorized to discharge to an impaired water unless the permittee:

- (A) prevents all exposure of stormwater to the pollutant(s)identified as an indicator of the impairment, and retains documentation of procedures taken to prevent exposure onsite with the Stormwater Pollution Prevention Plan (Plan); or
- (B) documents that the indicator pollutant(s) is not present at the site, and retains documentation of this finding with the Plan; or
- (C) in advance of submitting a registration, provides to the commissioner data to support a showing that the discharge is not expected to cause or contribute to an exceedance

of a water quality standard, and retains such data onsite with the Plan. To do this, the permittee must provide data and other technical information to the commissioner sufficient to demonstrate:

- (i) For discharges to waters without an established TMDL, that the discharge of the pollutant identified as an indicator of the impairment will meet in-stream water quality criteria at the point of discharge to the waterbody; or
- (ii) For discharges to waters with an established TMDL, that there are sufficient remaining Waste Load Allocations in the TMDL to allow the discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

To be eligible for authorization under this subsection, the permittee must receive an affirmative determination from the Commissioner that the discharge will not contribute to the existing impairment, in which case the permittee must maintain such determination onsite with the Plan.

If the permittee does not receive such affirmative determination pursuant to this subsection, or if an impairment exists for which an indicator or surrogate pollutant has not been designated but for which stormwater discharges are a potential cause, the industrial activity is not authorized by this general permit.

(c) Registration

Pursuant to the registration requirements (Section 4) of this general permit, a completed registration with respect to the industrial activity shall be filed with the commissioner unless exempted by the "No-Exposure Certification" section (Section 3(d)) of this general permit.

(d) No Exposure Certification

An industrial activity defined under category (10) of the definition of industrial activity in Section 2 may be exempted from the requirements of registration (Section 4), implementation of control measures (Section 5(b)), preparation of a Stormwater Pollution Prevention Plan (Section 5(c)), inspections (Section 5(d)), monitoring (Section 5(e)) and record keeping (Section 5(h)) only if the facility certifies that there are no materials, as defined in this category, exposed to stormwater. Such certification shall be filed on forms prescribed and provided by the commissioner and submitted with a \$250 processing fee. All previously filed No Exposure Certification forms must be renewed upon issuance of this general permit. If, at any time, the industrial activity is modified such that materials are exposed to stormwater, the facility must submit a registration and comply with all pertinent sections of this general permit.

(e) Geographic Area

This general permit applies throughout the State of Connecticut.

(f) Effective Date and Expiration Date of this General Permit

This general permit is effective on October 1, 2011 and expires on September 30, 2016.

(g) Effective Date of Authorization

An activity is authorized by this general permit as follows:

- For all facilities that **do not** make an electronic Pollution Prevention Plan available pursuant to Section 4(c)(2)(H), ninety (90) days after the submission of the registration form required by Section 4(c) or on the date of the Commissioner's affirmative determination pursuant to the conditions of Section 3(b)(9)) or on the date of the Commissioner's approval pursuant to the conditions of Section 4(c)(3), whichever is later, or
- For all facilities that **do** make a Pollution Prevention Plan available pursuant to Section 4(c)(2)(H), sixty (60) days after the submission of the registration form required by Section 4(c) or on the date of the Commissioner's affirmative determination pursuant to the conditions of Section 3(b)(9)) or on the date of the Commissioner's approval pursuant to the conditions of Section 4(c)(3), whichever is later.

(h) Revocation of an Individual Permit

If an activity is eligible for authorization under this general permit and such activity is presently authorized by an individual permit, the existing individual permit may be revoked by the commissioner upon a written request by the permittee. If the commissioner revokes such individual permit in writing, such revocation shall take effect on the effective date of authorization of such activity under this general permit.

(i) Issuance of an Individual Permit

If the commissioner issues an individual permit under section 22a-430 of the Connecticut General Statutes permitting an activity authorized by this general permit, authorization under this general permit shall cease beginning on the date such individual permit is issued.

Section 4. Registration Requirements

(a) Who Must File a Registration

With the exception noted below, any person or municipality that initiates, creates, originates or maintains a discharge authorized by this general permit, and has not filed a No-Exposure Certification form, shall file a registration form which meets the registration requirements of this section of this general permit. Such form shall be submitted along with the applicable fee, pursuant to Section 4(c)(1), either:

- for any industrial activity initiated, created, originated or maintained on or before the effective date of this general permit that **does not** make an electronic Pollution Prevention Plan available pursuant to Section 4(c)(2)(H), on or before ninety (90) days prior to the effective date (as identified in Section 3(f)) of this general permit; or
- for any industrial activity initiated, created, originated or maintained on or before the effective date of this general permit that **does** make an electronic Pollution Prevention Plan available pursuant to Section 4(c)(2)(H), on or before sixty (60) days prior to the effective date (as identified in Section 3(f)) of this general permit; or
- for a discharge from a facility authorized under this general permit whose ownership is transferred to a new owner, on or before 30 days following the date of transfer; or
- for any other discharge, on or before 90 (ninety) days prior to the date the industrial activity is initiated for those facilities that **do not** make an electronic Pollution Prevention Plan available pursuant to Section 4(c)(2)(H) and on or before 60 (sixty)

days prior to the date the industrial activity is initiated for those facilities that **do** make an electronic Pollution Prevention Plan available pursuant to Section 4(c)(2)(H).

If the facility or activity for which a registration is submitted under this permit is owned by one person or municipality but is leased or, in some other way, the legal responsibility of another person or municipality (the operator), the operator is responsible for submitting the registration required by this general permit. The registrant is responsible for compliance with all conditions of this general permit.

(b) Scope of Registration

A registrant shall register on one registration form only those discharges that are generated by such registrant on one site. A registrant may not submit more than one registration per site under this general permit.

(c) Contents of Registration

- (1) Fees
 - (A) The registration fee shall be submitted with a registration form. A registration shall not be deemed complete unless the registration fee has been paid in full. The fee shall be as follows:
 - (i) \$500 Registration Fee:
 - Companies that employ fewer than fifty (50) employees statewide (excluding seasonal employees employed no more than 120 days in a year) or have gross annual sales of less than five (5) million dollars;
 - Municipal, federal or state operated industrial activities; and
 - Small-scale composting facilities.
 - (ii) \$1,000 Registration Fee:
 - Companies that employ more than fifty (50) employees statewide (excluding seasonal employees employed no more than 120 days in a year) and have gross annual sales of greater than five (5) million dollars.

(Note that under CGS 22a-6, municipalities pay half the stated fee.)

- (B) The registration fee shall be paid by check or money order payable to the **Department of Environmental Protection**.
- (C) The registration fee is non-refundable.
- (2) Registration Form

A registration shall be filed on forms prescribed and provided by the commissioner and shall include, but not be limited to, the following:

(A) Legal name, address, and telephone number of the registrant. If the registrant is an entity transacting business in Connecticut, provide the exact name as registered with the Connecticut Secretary of the State.

- (B) Legal name, address, and telephone number of the owner of the property on which the industrial activity takes place or is to take place.
- (C) Legal name, address, and telephone number of any consultant(s) or engineer(s) retained by the registrant to prepare the registration or to design or construct the subject activity.
- (D) Location address of the site for which the registration is submitted.
- (E) Primary and secondary four-digit Standard Industrial Classification (SIC) codes for the industrial activity.
- (F) A brief description of the stormwater discharge including:
 - (i) Number, type, material, and size of conveyances, outfalls or channelized flows that run off the site (e.g. 15" concrete pipe);
 - (ii) Size of the property and amount of impervious surface in square feet or acres, including parking areas, driveways, roads, walkways, other paved areas and roofs;
 - (iii) The name of the separate storm sewer system or immediate surface water body or wetland to which the stormwater conveyance, outfall and/or runoff discharges, and whether or not the site discharges within 500 feet of a tidal wetland; and
 - (iv) The name of the watershed and nearest waterbody to which the site discharges and its Water Quality Classification.
- (G) An 8 ½" by 11" copy of the relevant portion or a full-sized original of a United States Geological Survey (USGS) quadrangle map, with a scale of 1:24,000, showing the exact location of the site and the area within a one mile radius of the site. Identify the quadrangle name on such copy.
- (H) If available, provide an internet address (URL) where the Plan required by Section 5(c) is accessible for public review. If the registrant claims that certain elements of their Plan constitute a trade secret or are otherwise exempt from the disclosure requirements of the state Freedom of Information Act (section 1-210 et seq of the Connecticut General Statutes, also called FOIA) as specified in that Act, they shall follow the procedures provided in the registration form instructions for this general permit regarding information subject to FOIA requirements. The process of complying with the FOIA requirements does not exempt the registrant from the registration and Plan preparation deadlines in Sections 4(a) and 5(c)(3) of this general permit.
- (I) The signature of the registrant and of the individual or individuals responsible for actually preparing the registration, each of who shall certify in writing as follows:
 - "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of

my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.

I certify that this permit registration is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

I also certify under penalty of law that I have read and understand all conditions of the General Permit for the Discharge of Stormwater Associated with Industrial Activity effective on October 1, 2011, that all conditions for eligibility for authorization under the general permit are met, all terms and conditions of the general permit are being met for all discharges which have been initiated and are the subject of this registration, and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements."

(3) Plan Submission for Certain Small-scale Composting Facilities

For small-scale composting facilities composting horse manure and bedding, the Plan shall be submitted to the commissioner for review and approval along with the completed registration form and fee specified in subsection (1) above. The activity is not authorized by this general permit until the commissioner approves the Plan and registration. All other small composting facilities are not required to submit their Plan with the registration.

(d) Availability of Registration and Plan

By the fifteenth (15th) day of each month, the Commissioner shall post on the DEP website a list of registration and no-exposure certification forms submitted in the previous month. The registrant may allow electronic access to their Plan by providing on their registration form an internet address (URL) in accordance with Section 4(c)(2)(H).

(1) Registration or No-exposure Certification Availability

On or before fifteen (15) days from the date of posting by the Commissioner, members of the public may request a copy of a registrant's registration form or the no-exposure certification form for review. In such cases, the Commissioner shall provide a copy of the registration form or no-exposure certification form to the requesting party within seven (7) days of such request.

(2) Plan Availability

- (A) In such cases where the registrant has made their Plan available electronically in accordance with Section 4(c)(2)(H), members of the public may access the Plan directly. On or before forty-five (45) days from the date the registration is posted by the Commissioner, such party may submit written comments on the Registration and/or Plan to the Commissioner.
- (B) In such cases where the registrant has **not** made their Plan available electronically in accordance with Section 4(c)(2)(H), on or before fifteen (15) days from the date of posting by the Commissioner, members of the public may submit a written request to

the Commissioner to obtain a copy of such Plan. The Commissioner shall inform the registrant of the request and the name of the requesting party. The registrant shall submit a copy of their Plan to the Commissioner within seven (7) days of their receipt of such request. On or before thirty (30) days from the date a member of the public receives a copy of the requested Plan from the Commissioner, they may submit written comments on the Registration and/or Plan to the Commissioner.

(3) Confidential Business Information

If the registrant claims that certain elements of their Plan constitute a trade secret or are otherwise exempt from the disclosure requirements of the state Freedom of Information Act (section 1-210 et seq of the Connecticut General Statutes, also called FOIA) as specified in that Act, they shall follow the procedures provided in the registration form instructions for this general permit regarding information subject to FOIA requirements. The process of complying with the FOIA requirements does not exempt the registrant from the registration and Plan preparation deadlines in Sections 4(a) and 5(c)(3) of this general permit.

(e) Where to File a Registration

A registration shall be filed with the commissioner at the following address:

CENTRAL PERMIT PROCESSING UNIT DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

(f) Additional Information

The commissioner may require a registrant to submit additional information, which the commissioner reasonably deems necessary to evaluate the consistency of the subject activity with the requirements for authorization under this general permit.

(g) Additional Notification

For activities authorized under this permit that are discharged through a municipal separate storm sewer system, a copy of the registration shall also be submitted to the owner and operator of that system.

(h) Action by Commissioner

- (1) The commissioner may reject without prejudice a registration if he or she determines that it does not satisfy the registration requirements (Section 4(c)) of this general permit. Any registration refiled after such a rejection shall be accompanied by the fee specified in the "Fees" section (Section 4(c)(1)) of this general permit.
- (2) The commissioner may disapprove a registration if he or she finds that the subject activity is inconsistent with the "Requirements for Authorization" section (Section 3) of this general permit, or for any other reason provided by law.
- (3) Disapproval of a registration under this subsection shall constitute notice to the registrant that the subject activity must be authorized by an individual permit.

(4) Rejection or disapproval of a registration shall be in writing.

Section 5. Conditions of This General Permit

The permittee shall at all times continue to meet the requirements for authorization set forth in Section 3 of this general permit. In addition, a permittee shall assure that authorized activities are conducted in accordance with the following conditions:

(a) Conditions Applicable to Certain Discharges

- (1) Any person who or municipality which initiates, creates, or originates a discharge of stormwater associated with industrial activity after October 1, 1997, which discharge is located less than 500 feet from a tidal wetlands which is not a fresh-tidal wetland, shall discharge such stormwater through a system designed to retain the volume of stormwater runoff generated by 1 inch of rainfall on the site. If there are site constraints that would prevent retention of this volume on-site (e.g., soil contamination, elevated ground-water, potential groundwater drinking supply area, etc.), documentation must be submitted, for the commissioner's review and written approval, which explains the site limitations and offers an alternative retention volume and/or additional stormwater treatment. For sites unable to comply with this section, the commissioner, at the commissioner's sole discretion, may require the submission of an individual permit application in lieu of authorization under this general permit.
- (2) Any person who or municipality which discharges stormwater below the high tide line into coastal, tidal, or navigable waters for which a permit is required under the Structures and Dredging Act in accordance with section 22a-361(a) of the Connecticut General Statutes or into tidal wetlands for which a permit is required under the Tidal Wetlands Act in accordance with section 22a-32 of the Connecticut General Statutes, shall obtain such permit(s) from the commissioner.
- (3) There shall be no distinctly visible floating scum, oil or other matter contained in the stormwater discharge. Excluded from this are naturally occurring substances such as leaves and twigs provided no person has placed such substances in or near the discharge.
- (4) The stormwater discharge shall not result in pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.
- (5) The stormwater discharge shall not cause or contribute to an exceedance of the applicable Water Quality Standards in the receiving water.
- (6) Any new stormwater discharge to high quality waters (as defined in the Water Quality Standards) shall be discharged in accordance with the Connecticut Anti-Degradation Implementation Policy in the Water Quality Standards manual.

(b) Control Measures

Control Measures are required Best Management Practices (BMP) that the permittee must implement to minimize the discharge of pollutants from the permitted facility. The term "minimize" means reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

(1) Good Housekeeping

The permittee must maintain a clean, orderly facility (e.g. sweeping at regular intervals, appropriate storage practices, proper garbage and waste management, dust control measures, etc.) in all areas that are exposed to rainfall and are potential sources of pollutants.

(2) Vehicle or Equipment Washing

The permittee must provide, at a minimum, that no washing or rinsing of equipment, buildings or vehicles shall be allowed at the site which would allow wash or rinse waters to enter any storm drainage system or surface waters of the State without a permit. Such discharges to groundwater are not authorized by this general permit.

(3) Floor Drains

The permittee must provide that all floor drains have been sealed, authorized by a local authority to discharge to sanitary sewer or allowed by DEP in accordance with the "Non-Stormwater Discharges" section (Section 5(b)(11)) of this general permit.

(4) Roof Areas

The permittee must identify roof areas that may be subject to drippage, dust or particulates from exhausts or vents or other sources of pollution. The permittee must inspect such areas to determine if any potential sources of stormwater pollution are present. If so, the permittee must minimize such sources or potential sources of pollution.

(5) Minimize Exposure

The permittee must minimize exposure to stormwater of materials identified in the "Inventory of Exposed Materials" section (Section 5(c)(2)(D)(ii)) of this general permit. Facilities in categories 2 and 10 of the definition of industrial activity in Section 2 of this general permit constructed after July 15, 2003 shall be constructed to preclude exposure of materials (as defined in the category 10 definition) by means of a permanent roof or cover or provide stormwater treatment, as identified in the Stormwater Quality Manual, for such exposed areas. Where the permittee believes it is not feasible to construct a permanent roof or cover, they shall submit their Plan (and plan review fee specified in Section 5(c)(4)(B)) showing the area(s) in question and reasons in writing for the commissioner's review and written approval.

(6) Sediment and Erosion Control

The permittee must identify areas that have a potential for soil erosion due to topography, activities, or other factors, and shall implement measures to limit erosion and stabilize such areas. All construction activities on site shall be conducted in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (Guidelines) and the "Future Construction" section (Section 5(c)(2)(I)) of this general permit.

(7) Management of Runoff

The permittee shall investigate the need for stormwater management or treatment practices that shall be used to divert, infiltrate, reuse, or treat stormwater runoff in a manner that minimizes pollutants in stormwater discharges from the site. Any evaluation, construction

or modification of the design of a stormwater drainage system requires certification by a professional engineer licensed to practice in the State of Connecticut. The permittee shall implement and maintain stormwater management or treatment measures determined to be reasonable and appropriate to minimize the discharge of pollutants from the site.

In implementing infiltration practices, care must be taken to avoid ground water contamination in accordance with Appendix C. Any stormwater infiltration measures implemented by the permittee and located within an aquifer protection area as mapped under section 22a-354b of the Connecticut General Statutes shall be conducted pursuant to sections 8(c) and 9(b) of the Aquifer Protection Regulations (section 22a-354i(1)-(10) of the Regulations of Connecticut State Agencies). The permittee must assure that stormwater run-off generated from the regulated activity is managed in a manner so as to prevent pollution of groundwater, and shall comply with all the requirements of this permit.

The permittee shall consider the potential of various sources at the facility to contribute pollutants to stormwater discharges associated with industrial activity when determining reasonable and appropriate measures. Where feasible, the permittee shall divert uncontaminated run-on to avoid areas that may contribute pollutants. Other appropriate stormwater management or treatment measures may include but are not limited to: vegetative swales or buffer strips, reuse of collected stormwater (such as for process water, cooling water or as an irrigation source), treatment technologies (e.g. swirl concentrators, sand filters, etc.), snow management activities, bioretention cells, green roofs, pervious pavement and wet detention/retention basins. The permittee shall ensure that such measures are properly designed, implemented and maintained in accordance with the Stormwater Quality Manual.

(8) Preventive Maintenance

The permittee must implement a preventive maintenance program, which shall include but not be limited to: the inspection and maintenance of stormwater management devices (e.g. cleaning stormwater treatment devices, catch basins); the visual inspection and/or testing of on-site equipment and systems to identify conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters; and the appropriate maintenance of such equipment and systems. These areas shall be included in the Routine Inspections conducted under Section 5(d)(2) of this general permit. If the permittee maintains an existing preventive maintenance program that addresses the requirements of this control measure, they may use that program to meet this requirement. The existence of such a program and the location of its maintenance records shall be referenced in the Plan.

(9) Spill Prevention and Response Procedures

The permittee must minimize the potential for leaks and spills. This shall include clearly identifying areas where potential spills can occur and their accompanying drainage points. The permittee must plainly label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage in areas that could contribute pollutants to stormwater runoff. The permittee shall identify procedures for containing, reporting and cleaning up spills. These procedures must be provided to the appropriate personnel through Employee Training (subsection 10, below) along with the necessary equipment to implement a cleanup.

A) Containment

To prevent unauthorized discharges of liquid chemicals or wastewater from commingling with or polluting a facility's stormwater discharges, or otherwise causing pollution to the waters of the state, the permittee shall comply with the following requirements, as applicable:

(i) Stationary Storage or Storage Areas

For the purposes of Section 5(b)(9)(A) of this general permit only, **storage area** means an exterior area, which is or has the potential to be exposed to stormwater, that contains one or more tanks or containers utilized for the storage of liquid chemicals or for the collection, storage or treatment of wastewater. Any stationary above-ground tank, container or storage area used: (1) for the storage of liquid chemicals as identified in the "Spills and Leaks" section (Section 5(c)(2)(D)(iv)) of this general permit; or (2) for the collection, storage or treatment of wastewater shall, at a minimum, comply with one of the following types of secondary containment requirements:

- 1) A double-walled above-ground tank or container; or
- 2) For any storage area, tank or container installed prior to the date of authorization of this general permit, an impermeable secondary containment area which will hold at least 100% of the volume of the largest tank or container or 10% of the total volume of all tanks and containers in the area, whichever is larger, without overflow from such secondary containment area: or
- 3) For any storage area, tank or container installed after the date of authorization of this general permit, an impermeable secondary containment area which will hold at least 110% of the volume of the largest tank or container or 10% of the total volume of all tanks and containers in the area, whichever is larger, without overflow from such secondary containment area.

(ii) Mobile or Portable Storage

Any mobile or portable above-ground tank or container used for the collection or storage of wastewater shall comply with the secondary containment requirements of Section 5(b)(9)(A)(i) above, unless the following minimum requirements are met:

- Such mobile or portable tank or container and related appurtenances (i.e., piping, fittings, valves, gauges, alarms, switches, etc.) are designed, operated and maintained in a manner to prevent releases of wastewater resulting from factors including, but not limited to, physical or chemical damage, tampering or vandalism, freezing and thawing; and
- 2) In addition to the requirements of Section 5(*b*)(9)(A)(ii)(1) above, for any mobile or portable tank or container and related appurtenances that are affixed to a trailer, such trailer shall be a registered motor vehicle designed, operated and maintained to be capable of on-road transport of wastewater at all times.

- (iii) Containment exemption for certain stationary above-ground storage tanks, containers, and areas
 - 1) The secondary containment requirements of Section 5(*b*)(9)(A)(i) above do not apply to stationary above-ground storage and treatment tanks and containers, and storage areas if such tanks, containers, and storage areas are associated with a discharge(s) authorized by a permit issued pursuant to Section 22a-430 or 22a-430b of the Connecticut General Statutes.

(iv) Additional requirements

For industrial activities initiated after October 1, 1992, if an impermeable secondary containment area is required by 5(b)(9)(A)(i) or (ii) above, such containment area shall be roofed in a manner which minimizes stormwater entry to the containment area, except for a containment area which stores tanks or containers of 100 gallon capacity or more, in which case a roof is not required.

Stormwater that may accumulate in a containment area may be discharged only after the permittee conducts testing to confirm that it contains none of the relevant pollutants stored therein. For petroleum storage containment areas, visual inspection for a sheen fulfills this requirement. If testing is not conducted or if it indicates the presence of a relevant pollutant, this containment water must be treated and/or disposed of according to DEP and federal regulations.

B) Dumpsters

The permittee must ensure that all dumpsters, trash compactors, and "roll-off" containers used to store waste or recyclable materials are in sound watertight condition and have covers and drain plugs intact, or are in roofed areas that will prevent exposure to rainfall and will not allow dumpster leakage to enter any stormwater drainage system. All covers on dumpsters not under a roof must be closed when dumpsters are not being loaded or unloaded.

C) Loading Docks

The permittee shall provide that for all industrial activities initiated after July 15, 2003, loading docks (excluding those that allow a vehicle to enter the building) shall be protected with a permanent roof or other structure that protects the loading dock from direct rainfall. Stormwater collection and drainage facilities adjacent to the loading dock shall be designed and maintained in a way that prevents any materials spilled or released at the loading dock from discharging to the storm sewer system.

(10) Employee Training

The permittee shall ensure that all employees whose activities may affect stormwater quality receive training within ninety (90) days of employment and at least once a year thereafter to make them familiar with the components and goals of these control measures and the Plan. Training shall address topics such as emergency equipment location, spill response management, control measures, inspection requirements, good housekeeping and materials management practices. Training shall be conducted or supervised by a member of the Pollution Prevention Team or other qualified person and a written record shall be maintained

in the Plan, including the date(s), employee name, employee responsibility and training agenda.

(11) Non-Stormwater Discharges

The Permittee must eliminate non-stormwater discharges except as provided in "Non-Stormwater Discharge Certification" (Section 5(c)(2)(F)) or as authorized by an individual permit issued pursuant to section 22a-430 or a general permit issued pursuant to 22a-430b of the Connecticut General Statutes, including the provisions of this general permit.

(12) Solid De-icing Material Storage

The permittee must ensure that storage piles of de-icing materials (including pure salt, salt alternatives or either of these mixed with other materials) used for deicing or other commercial or industrial purposes that are in place for more than 180 days shall be enclosed or covered by a rigid or flexible roof or other structural means. Such structure shall not allow for the migration or release of material outside of the structure through its sidewalls. As a temporary measure (not to exceed two years from the effective date of this general permit), a waterproof cover may be used to prevent exposure to precipitation (except for exposure necessary to add or remove materials from the pile) until a structure can be provided. For temporary storage piles of de-icing materials in place for less than 180 days per year, a waterproof cover may be used to prevent exposure to precipitation (except for exposure necessary to add or remove materials from the pile). In areas with a groundwater classification of GA or GAA, an impervious liner shall be utilized under any de-icing material pile to prevent infiltration to groundwater.

In addition, no new road salt or de-icing materials storage facilities shall be located within a 100-year floodplain as defined and mapped for each municipality under 44 CFR 59 et seq. or within 250 feet of a well utilized for potable drinking water supply or within a Level A aquifer protection area as defined by mapping pursuant to section 22a-354c of the Connecticut General Statutes.

(13) Sector-Based Control Measures

Section 5(f) contains additional control measures for certain industrial activities ("sectors"). These are specific control measures that apply only to the industries in a given sector and are to be implemented in addition to the control measures in this section.

(c) Stormwater Pollution Prevention Plan (Plan)

(1) Development of Plan

(A) The permittee shall develop a Stormwater Pollution Prevention Plan ("Plan") for each site. The permittee shall perform all actions required by the Plan in accordance with the schedule set forth in "Deadlines for Plan Preparation and Compliance" (Section 5(c)(3)) of this general permit and including implementation of the Control Measures in Section 5(b), inspections in Section 5(d), monitoring in Section 5(e) and any sector-specific requirements in Section 5(f). The Plan shall include records and documentation of compliance with these elements and shall be kept on-site at all times along with a copy of this general permit. The permittee shall maintain compliance with the Plan thereafter.

(B) For any stormwater discharges that were permitted under the General Permit for the Discharge of Stormwater Associated with Industrial Activity issued October 1, 2002 (modified July 15, 2003), the permittee must update the existing Plan in accordance with the "Contents of the Plan" (Section 5(c)(2)), "Control Measures" (Section 5(b)), "Additional Requirements for Certain Sectors" (Section 5(f)) and "Monitoring" (Section 5(e)) sections of this general permit. The Plan shall be recertified by a professional engineer licensed to practice in the State of Connecticut or a Certified Hazardous Materials Manager in accordance with the "Plan Certification" (Section 5(c)(7)) and "Non-Stormwater Discharge Certification" (Section 5(c)(2)(F)) sections of this general permit at the time of registration for this general permit. The permittee shall maintain compliance with such Plan thereafter.

(2) Contents of Plan

The Plan shall be representative of current site conditions and shall address, at a minimum, all the elements below. If an element is not applicable to the facility, the Plan shall identify it and provide an explanation as to why the element does not apply.

(A) Facility Description

Provide a description of the nature of the industrial activities at the facility.

(B) General location map

Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of the facility and all receiving waters to which stormwater discharges.

(C) Pollution Prevention Team

The permittee shall identify a specific individual or individuals for the site who shall serve as members of a Stormwater Pollution Prevention Team ("team"). The team shall be responsible for implementing the Plan and assisting in the implementation, maintenance, and development of revisions to the Plan as well as maintaining control measures and taking corrective actions where required. At least one team member shall be present at the facility or on call during all operational shifts. The Plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the Plan. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and the Plan.

(D) Potential Pollutant Sources

The Plan shall map and describe the potential sources of pollutants that may reasonably be expected to affect stormwater quality at the site or that may result in the discharge of pollutants during dry weather from the site. The Plan shall identify all activities and materials that may be a source of stormwater pollution at the site. Accordingly, the Plan shall include, but not be limited to the following:

(i) Site Map

A site map (at a defined or approximate scale) shall be developed showing:

- 1) a north arrow and surveyed or approximate property lines including the total site acreage;
- 2) location of existing buildings and structures;
- 3) the overall site size and amount of impervious coverage as well as an outline of the drainage area, including the extent of impervious surface, for each stormwater outfall and direction of flow within the drainage area;
- 4) existing structural control measures installed to reduce pollutants in stormwater runoff;
- 5) locations of all stormwater conveyances including catchbasins, ditches, pipes, and swales as well as the location of any non-stormwater discharges;
- 6) the areal extent of any wetlands to which stormwater discharges;
- 7) the receiving surface water body or bodies to which the site discharges including the identification of any impaired waters and whether or not a TMDL has been established for them;
- 8) location where major spills or leaks (identified under Section 5(c)(2)(D)(iv) below) have occurred;
- 9) locations of all stormwater monitoring points including latitude and longitude, where available;
- 10) locations of discharges to a municipal storm sewer system;
- 11) locations of discharges to groundwater through an infiltration system;
- 12) locations where any drainage run-on enters the site; and
- 13) each location of the following activities and associated types of pollutants where such activities are exposed to precipitation:
 - fueling stations;
 - vehicle and equipment maintenance and/or cleaning areas;
 - loading/unloading areas;
 - locations used for the treatment, storage or disposal of wastes;
 - liquid storage tanks;
 - de-icing material storage areas;
 - processing areas;
 - storage areas;
 - areas with the potential for erosion that may impact surface waters or wetlands or may have off-site impacts; and
 - any other potential pollutant sources.
- (ii) Inventory of Exposed Materials

A tabular inventory of non-gaseous materials at the site, including a description of potential pollutants associated with those materials that may be exposed to stormwater between the time of three years prior to the date of certification of the Plan and the present for the following areas:

- 1) loading and unloading operations;
- 2) roof areas;
- 3) outdoor storage activities;
- 4) outdoor manufacturing or processing activities;
- 5) dust or particulate generating processes; and
- 6) on-site waste disposal practices.

(iii) Summary of Potential Pollutant Sources

A narrative summary of each area of the site specified in "Inventory of Exposed Materials" (Section 5(c)(2)(D)(ii), above) of this general permit and each associated potential source of pollution. Such summary shall include:

- 1) method and location of on-site storage or disposal;
- materials management practices employed to minimize contact of materials with stormwater runoff between the time of three years prior to the effective date of this permit and the present;
- 3) the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff; and
- 4) a description of any treatment the stormwater receives.

(iv) Spills and Leaks

A list of spills and leaks of five gallons or more of petroleum products, or of toxic or hazardous substances which could affect stormwater, as listed in section 22a-430-4 (Appendix B Tables II, III and V, and Appendix D) of the Regulations of Connecticut State Agencies, and 40 CFR 116.4, that occurred at the facility after the date of three years prior to the date of certification of the Plan.

(E) Control Measures

The permittee must document the location and type of control measures installed and implemented at the site in accordance with "Control Measures" (Section 5(b)). The permittee shall discuss the appropriateness and priorities of control measures in the Plan and how they address identified potential sources of pollutants at the site. The Plan shall include a schedule for implementing such controls measures if not already implemented. In addition, the permittee must implement those additional control measures that may be required in "Additional Control Measures for Certain Sectors" (Section 5(f)).

(F) Non-Stormwater Discharge Certification

The Plan shall include the following certification, signed by a professional engineer licensed to practice in the State of Connecticut or a Certified Hazardous Materials Manager:

"I certify that in my professional judgment, the stormwater discharge from the site consists only of stormwater, or of stormwater combined with wastewater authorized by an effective permit issued under section 22a-430 or section 22a-430b of the Connecticut General Statutes, including the provisions of this general permit, or of stormwater combined with any of the following discharges provided they do not contribute to a violation of water quality standards:

- landscape irrigation or lawn watering;
- uncontaminated groundwater discharges such as pumped groundwater, foundation drains, water from crawl space pumps and footing drains;
- discharges of uncontaminated air conditioner or refrigeration condensate;
- water sprayed for dust control or at a truck load wet-down station;
- naturally occurring discharges such as rising groundwaters, uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20)), springs, and flows from riparian habitats and wetlands.

This certification is based on testing and/or evaluation of the stormwater discharge from the site. I further certify that all potential sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test have been described in detail in the Stormwater Pollution Prevention Plan prepared for the site. I further certify that no interior building floor drains exist unless such floor drain connection has been approved and permitted by the commissioner or otherwise authorized by a local authority for discharge as domestic sewage to sanitary sewer. I am aware that there may be significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

(G) Additional requirements for stormwater discharges associated with industrial activity through municipal separate storm sewer systems as may be required by the municipality.

In addition to the applicable requirements of this general permit, the Plan must show that sites authorized by this permit shall comply with applicable requirements in an MS4 permit for the municipal separate storm sewer system that receives the industrial facility's discharge, provided such discharger has been notified of such conditions.

(H) Consistency with Other Plans and Permits

The Plan may reference requirements contained in a Spill Prevention Control and Countermeasure (SPCC) plan or a plan prepared or approved under the Resource Conservation and Recovery Act (RCRA) and other plans required by state, federal or local law. A copy of the pertinent sections of any referenced plan must be kept with the Plan. The Plan shall identify all general and individual permits issued by the DEP for which the facility is authorized.

(I) Future Construction

Note that any construction activity that disturbs greater than one acre must be conducted in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (as amended). All construction activities, regardless of size, shall comply with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control during construction and the 2004 Connecticut Stormwater Quality Manual for the design and implementation of post-construction stormwater management measures. In addition, the permittee shall avoid, wherever possible, the use of copper or galvanized roofing or building materials for any new building construction where these materials will be exposed to stormwater.

(J) Monitoring Program

A description of the monitoring program and sampling data for stormwater discharges at the site, in accordance with the "Monitoring" section (Section 5(e)) of this general permit. Additional monitoring requirements may be required under Sections 5(f) and 5(g).

(K) Schedules and Procedures

The permittee shall document in the Plan the schedules and procedures for implementation of control measures, monitoring and inspections. These include but are not limited to: sweeping, waste management practices and other good housekeeping measures; regular inspections, testing, maintenance, and repair of all industrial equipment and systems potentially exposed to stormwater; procedures for preventing and responding to spills and leaks; employee training; routine, semiannual and any other inspections; visual monitoring; and any quarterly, semiannual, effluent limitation and/or impaired waters monitoring.

(3) Deadlines for Plan Preparation and Compliance

For any stormwater discharges associated with industrial activity initiated after the effective date of this general permit, the Plan shall be prepared at the time of registration. The permittee shall perform all actions required by such Plan upon obtaining permit coverage, and shall maintain compliance with such Plan thereafter.

(4) Signature and Plan Review

(A) The Plan shall be signed as follows:

- (i) for a corporation, by a responsible corporate officer or a duly authorized representative thereof, as those terms are defined in section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies;
- (ii) for a municipality, state, federal, or other public agency, by either a principal executive officer or a ranking elected official, as those terms are defined in section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies;
- (iii) for a partnership or a sole proprietorship, by a general partner or the proprietor, respectively.

When a Plan is signed by a duly authorized representative, a statement of authorization shall be included in the Plan. The Plan shall also be certified, in accordance with "Plan Certification" (Section 5(c)(7)) of this general permit, by a professional engineer licensed in the State of Connecticut or a Certified Hazardous Materials Manager.

The Plan shall be retained on site at the facility that generates the stormwater discharge.

- (B) The permittee shall make a copy of the Plan available to the following immediately upon request:
 - (i) the commissioner at his/her own request or as the result of a request from a member of the public pursuant to "Availability of Registration and Plan" (Section 4(*d*));
 - (ii) in the case of a stormwater discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system;
 - (iii) in the case of a stormwater discharge associated with industrial activity which discharges to a water supply watershed, to the public water supply company.

For all sites submitting a Plan to the Commissioner at the Commissioner's sole request (not a request from the public), a **plan review fee of \$500** established by section 22a-430-6 of the Regulations of Connecticut State Agencies shall be submitted with the Plan. **The plan review fee for municipalities shall be half** (\$250).

- (C) The Commissioner may notify the permittee at any time that the Plan does not meet one or more of the requirements of this section. Within 120 days of such notification unless otherwise specified by the commissioner in writing, the permittee shall revise the Plan, perform all actions required by the revised Plan, and shall inform the commissioner in writing that the requested changes have been made and implemented, and such other information as the commissioner requires.
- (5) Keeping Plan Current

The permittee shall amend the Plan whenever;

- (A) there is a change at the site which has an effect on the potential to cause pollution of the surface waters of the state:
- (B) the actions required by the Plan fail to ensure or adequately protect against pollution of the surface waters of the state; or
- (C) the Commissioner requests modification of the Plan;
- (D) the permittee is notified that they are subject to requirements because the receiving water to which the industrial activity discharges has been designated as impaired under Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report;

- (E) the permittee is notified that a TMDL to which the permittee is subject has been established for the stormwater receiving water;
- (F) necessary to address any significant sources or potential sources of pollution identified as a result of any inspection or visual monitoring;
- (G) required as a result of monitoring benchmarks or effluent limitations in "Monitoring" (Section 5(e)) or "Additional Requirements for Certain Sectors" (Section 5(f)).

The Plan shall be amended and all actions required by the Plan shall be completed within one hundred twenty (120) days (or within another interval as may be specified in this general permit or as may be approved in writing by the Commissioner) of the date the permittee becomes aware or should have become aware that any of the conditions listed above has occurred.

If significant changes are made to the site or to the Plan in accordance with paragraphs 5(A)-(G) above, the Plan shall be recertified in accordance with the "Non-Stormwater Discharges" (Section 5(b)(11)) and "Plan Certification" (Section 5(c)(7)) sections of this general permit, by a professional engineer licensed to practice in the State of Connecticut or a Certified Hazardous Materials Manager. The permittee shall maintain compliance with such Plan thereafter.

(6) Failure to Prepare or Amend Plan

In no event shall failure to complete or update a Plan in accordance with the "Development of Plan" (Section 5(c)(1)) and "Keeping Plan Current" (Section 5(c)(5)) sections of this general permit relieve a permittee of responsibility to implement actions required to protect the surface waters of the state, complete any actions that would have been required by such Plan, and to comply with all conditions of the permit.

(7) Plan Certification

The Plan shall contain the following certification, signed by a professional engineer licensed to practice in the State of Connecticut or a Certified Hazardous Materials Manager:

"I certify that I have thoroughly and completely reviewed the Stormwater Pollution Prevention Plan prepared for this site. I further certify, based on such review and site visit by myself or my agent, and on my professional judgment, that the Stormwater Pollution Prevention Plan meets the criteria set forth in the General Permit for the Discharge of Stormwater Associated with Industrial Activity effective on October 1, 2011. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

(d) Inspections

(1) Semi-Annual Inspections

The permittee must provide that qualified personnel shall conduct comprehensive site inspections at appropriate intervals specified in the Plan, but in no event less frequently than twice a year. Such evaluations shall, at a minimum, include:

- (A) Visual inspection of material handling areas and other potential sources of pollution identified in the Plan for evidence of, or the potential for, pollutants entering the stormwater drainage system. Structural stormwater management measures, erosion control measures, control measures and other structural pollution prevention measures identified in the Plan shall be observed to ensure that they are implemented and maintained properly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made. Inspections should be made during rainfall events if possible.
- (B) Preparation of a report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the Plan, actions taken, and updates made to the Plan shall be made and retained as part of the Stormwater Pollution Prevention Plan for at least five years. The report shall be signed by the permittee.

(2) Routine Inspections

In addition to the Semi-Annual Inspections required above, the permittee shall identify in the Plan qualified personnel to visually inspect designated equipment and specific sensitive areas of the site at least monthly. A written set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of routine inspections shall be maintained in the Plan kept on-site.

(e) Monitoring Requirements

(1) Outfall Monitoring

All permittees must conduct stormwater outfall monitoring under this general permit. There are different monitoring procedures, frequencies and parameters required of certain permittees dependent upon the nature of their industrial activity, the levels of pollutants in their stormwater discharge and the nature of the receiving waters to which they discharge. In addition, the permittee may be required to modify their Plan and control measures based on their monitoring results. For guidance on outfall monitoring, see Appendix B.

(A) Standard Monitoring Parameters

All permittees are required to monitor for the standard parameters as specified in this subsection. Additional monitoring parameters may be included in "Additional Requirements for Certain Sectors" (Section 5(f)) and/or in "Discharges to Impaired Waters" (Section 5(g)).

(i) Visual Monitoring

Once each quarter for the entire permit term, the permittee must collect a stormwater sample from each outfall (or a representative outfall pursuant to Section 5(e)(2)(B)) and conduct a visual assessment of each of these samples. These samples should be collected in such a manner that the samples are representative of the stormwater discharge. For monitoring purposes, quarters will begin on January 1, April 1, July 1 and October 1.

The visual assessment must be made of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area. The permittee must visually

inspect the sample for the presence of the following water quality characteristics:

- Color:
- Odor:
- Clarity;
- Floating solids;
- Settled solids:
- Suspended solids;
- Foam:
- Oil sheen; and
- Other obvious indicators of stormwater pollution.

If, based on the above indicators, the visual assessment indicates the control measures for the facility are inadequate or are not being properly operated and maintained, the permittee must review and revise the selection, design, installation and implementation of the control measures to ensure that the condition is eliminated and will not be repeated in the future. The permittee shall maintain documentation of these procedures in the Plan.

(ii) General Monitoring Requirements

For all industrial activities, as defined in Section 2 of this general permit, stormwater monitoring shall be conducted semiannually (or at an alternate frequency as may be specified in "Additional Requirements for Certain Sectors" (Section 5(f)) commencing upon the effective date of this general permit or upon the date of authorization under Section 3(g) of this permit. One monitoring event shall be conducted between October 1 and March 31. The other monitoring event shall be conducted between April 1 and September 30. Monitoring events shall be separated by at least 30 days. Monitoring shall be conducted for the parameters listed below:

Chemical Oxygen Demand (mg/l)
Total Oil and Grease (mg/l)
pH (S.U.)
Total Suspended Solids (mg/l)
Total Phosphorus (mg/l)
Total Kjeldahl Nitrogen (mg/l)
Nitrate as Nitrogen (mg/l)
Total Copper (mg/l)
Total Lead (mg/l)
Total Zinc (mg/l)

Annual monitoring shall also be conducted for Aquatic Toxicity pursuant to subsection (C) below.

(iii) In addition to the list of parameters in Section 5(e)(1)(A) of this general permit, uncontaminated rainfall pH shall be measured for the same rain event during which the runoff sample is taken.

(B) Standard Monitoring Benchmarks

All permittees are required to comply with the benchmarks for the standard parameters as specified in this subsection **unless** otherwise specified in "Additional Requirements for Certain Sectors" (Section 5(f)). Additional monitoring benchmarks may also be included in Section 5(f).

(i) Schedule

Benchmark monitoring must be conducted semiannually, as specified in Section 5(e)(1)(A) upon the effective date of this general permit or upon the date of authorization under Section 3(g) of this permit. Benchmark monitoring may be conducted in conjunction with the quarterly "Visual Monitoring" in Section 5(e)(1)(A)(i), above. Also, see "Toxicity Monitoring" in subsection C below.

(ii) Benchmarks

These benchmarks apply to all permittees. Additional benchmarks may apply to industries in specific sectors as identified in Section 5(f).

Chemical Oxygen Demand (mg/l)	75
Total Oil and Grease (mg/l)	5
Sample pH	5-9
Total Suspended Solids (mg/l)	90
Total Phosphorus (mg/l)	0.40
Total Kjeldahl Nitrogen (mg/l)	2.30
Nitrate as Nitrogen (mg/l)	1.10
Total Copper (mg/l)	0.059
Total Lead (mg/l)	0.076
Total Zinc (mg/l)	0.160

The benchmarks for the parameters above (except metals) are based upon 80th percentiles of the cumulative relative frequency graphs developed from stormwater results reported under the General Permit for the Discharge of Stormwater Associated with Industrial Activity for the sampling years 2003 to 2007. Note that the benchmarks for copper, lead and zinc are based upon state Water Quality Standards and have been determined to be protective of water quality at typical dilution rates. However, regardless of the benchmarks, discharge monitoring data or other site specific information may demonstrate that a discharge is not protective of water quality. In such a case, the department may require additional measures to reduce the discharge of pollutants for any discharge specifically found to be causing or contributing to an exceedance of Water Quality Standards in the receiving water. Provided the permittee complies with all requirements of this Standard Monitoring Benchmarks subsection, exceedance of the benchmarks is not, in itself, a violation of this general permit.

(iii) Data not exceeding benchmarks

After collection of 4 semiannual samples, if the average of the 4 monitoring values for any parameter does not exceed the benchmark, the monitoring requirements for that parameter have been fulfilled for the permit term. For averaging purposes for any individual sample parameter analyzed using

procedures consistent with "Test Procedures" (Section 5(e)(2)(D)), which is determined to be less than the method detection limit, use a value of half the method detection limit reported by the analyzing laboratory. For sample values that fall between the method detection level and the reporting level (i.e., a confirmed detection but below the level that can be reliably quantified), use a value of half the reporting level reported by the analyzing laboratory. Once the benchmark for sample pH has been met and monitoring for pH has been fulfilled, the measurement of rainfall pH is no longer required.

(iv) Data exceeding benchmarks

Within 120 days of receiving the results of the fourth semiannual sample, if the average of the 4 semiannual monitoring values for any parameter exceeds the benchmark, the permittee must, in accordance with the "Keeping Plan Current" (Section 5(c)(5)) section, review the selection, design, installation and implementation of the control measures to determine if modifications are necessary to meet the benchmarks in this permit, and either:

- Make the necessary modifications to the control measures and Plan and continue semiannual monitoring until the permittee has completed 4 consecutive semiannual monitoring events for which the average does not exceed the benchmark; or
- Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to implement additional control measures or meet the benchmarks, in which case the permittee must continue monitoring once per year. The permittee must also document the rationale for concluding that no further pollutant reductions are achievable and submit this documentation to the commissioner for written approval. The permittee must retain all records related to this documentation with the Plan.

If an exceedance of the 4 event average is mathematically certain, the permittee must review the control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full 4 monitoring events, in accordance with the "Keeping Plan Current" (Section 5(c)(5)) section. If after modifying the control measures and conducting additional semiannual monitoring, the average of the most recent 4 monitoring events still exceeds the benchmark (or if an exceedance of the benchmark by the 4 event average is mathematically certain for the most recent 4 monitoring events), the permittee must again review the control measures and take one of the two actions above.

(v) Off-site and natural background pollutant levels

Following the first 4 semiannual samples of benchmark monitoring (or sooner if the exceedance is triggered by less than 4 monitoring events), if the average concentration of a pollutant exceeds a benchmark value, and the permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background or in "run-on" entering from off-site, the permittee is not required to perform corrective action or additional benchmark monitoring provided all of the following conditions are met:

- The average concentration of the benchmark monitoring results is less than or equal to the concentration of that pollutant in the natural background or off-site run-on;
- The permittee documents and maintains with the Plan the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background or off-site pollutant levels. The permittee must include in the supporting rationale any data previously collected by them or others that describe the levels of natural background pollutants in the stormwater discharge;
- The permittee demonstrates that the diversion of off-site run-on containing these pollutant levels is not feasible or practicable;
- The permittee notifies the commissioner on the final semiannual benchmark monitoring report that the benchmark exceedances are attributable solely to natural background or off-site pollutant levels; and
- The commissioner issues a written approval of the permittee's documentation demonstrating that the benchmark exceedances are attributable solely to natural background or off-site pollutant levels.

Natural background pollutants include those substances that are naturally occurring in rainfall, soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the site.

(C) Toxicity Monitoring

The permittee shall monitor annually for aquatic toxicity during the first two years following the date of authorization under Section 3(g) of this permit. This parameter shall be included in a regularly scheduled semiannual sample.

(D) Monitoring of Discharges to Impaired Waters

Industrial activities that discharge to impaired waters, as identified in Section 5(g) below, must conduct additional monitoring of discharges in addition to the requirements of subsections (A) through (C) above.

(i) Discharges to Impaired Waters Without an Established Total Maximum Daily Load (TMDL)

If an industrial activity discharges to an impaired water without a TMDL, the permittee must monitor annually for any indicator pollutants identified as contributing to the impairment and for which a standard analytical method exists. No monitoring is required when a waterbody's biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is identified as an indicator of the impairment, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or temperature.

This monitoring requirement does not apply after the first year of monitoring if the indicator pollutant is not detected above natural background levels, as determined by the Commissioner, in the stormwater discharge or is the result of run-on entering from offsite and the permittee has documented that diversion of this off-site run-on is not feasible or practicable in accordance with "Off-site and natural background pollutant levels" (Section 5(e)(1)(B)(v)). In either case, the permittee must provide such documentation to the Commissioner.

(ii) Discharges to Impaired Waters With an Established Total Maximum Daily Load (TMDL)

For stormwater discharges to waters for which there is an established TMDL, the permittee is not required to monitor for any indicator pollutant identified in the TMDL unless informed in writing by the DEP, upon examination of the applicable TMDL and/or Waste Load Allocation (WLA), that the permittee is subject to such a requirement consistent with the assumptions of the applicable TMDL and/or WLA. DEP's notice will include specifications on which indicator pollutant to monitor and the required monitoring frequency during the first year of permit coverage. Following the first year of monitoring:

- If the indicator pollutant is not detected in any of the first year samples, the permittee may discontinue further sampling, unless the TMDL has specific instructions to the contrary, in which case the permittee must follow those instructions. The permittee must keep records of this finding onsite with the Plan.
- If the permittee detects the presence of the indicator pollutant in the stormwater discharge for any of the samples collected in the first year, the permittee must continue monitoring annually throughout the term of this permit, unless the TMDL specifies more frequent monitoring, in which case the TMDL requirements must be followed.

(E) Sector-Specific Benchmarks

For those permittees conducting sector-specific additional monitoring on a quarterly or semiannual basis in accordance with a sector in "Additional Requirements for Certain Sectors" (Section 5(f)), the provisions for meeting or exceeding any sector-specific benchmarks shall follow the requirements of "Data not exceeding benchmarks" and "Data exceeding benchmarks" (Sections 5(e)(1)(B)(iii) and (iv), respectively), applying to the most recent 4 monitoring events, whether quarterly or semiannually.

(F) Effluent Limitations Monitoring

Certain industrial facilities are required to comply with numeric effluent limits determined by EPA as specified in "Additional Requirements for Certain Sectors" (Section 5(*f*)). Exceedance of any effluent limit is a violation of the general permit. Where a benchmark and an effluent limit both apply to a given parameter, the requirements to address the effluent limit exceedance supersede those of the benchmark exceedance. If the permittee exceeds an effluent limit, they must comply with the following measures:

(i) Exceedance of an Effluent Limit

If a stormwater discharge exceeds an effluent limit to which a facility is subject, the permittee must review the selection, design, installation and implementation of the control measures and make the modifications to the control measures and Plan necessary to meet the effluent limit. The permittee must then conduct follow-up monitoring during the next qualifying rain event for any parameter which exceeded an effluent limit.

(ii) Exceedance Report

In addition to any reporting required after an initial effluent limit exceedance as required by Section 22a-430-3(j)(11)(D) of the Regulations of CT State Agencies, the permittee must submit an Exceedance Report to DEP on or before 30 days from the date the permittee receives the lab results if follow-up monitoring pursuant to subparagraph (i) above exceeds a numeric effluent limit. The report must include the following:

- DEP permit number;
- Facility name, physical address and location;
- Name of receiving water;
- Monitoring data from this and the preceding monitoring event(s);
- An explanation of the measures taken and to be taken to correct the violation; and
- An appropriate contact name and phone number.

(2) Stormwater Monitoring Procedures

(A) All samples shall be collected from discharges resulting from a storm event that occurs at least 72 hours after any previous storm event generating a stormwater discharge. Any sample containing snow or ice melt must be identified on the Stormwater Monitoring Report form.

For sites that discharge through a detention basin or other stormwater management structure, the sample shall be taken at the discharge from the basin or structure. If no discharge occurs during a monitoring period, a Stormwater Monitoring Report (SMR) form shall still be submitted in accordance with the "Reporting Requirements" section (Section 5(h)(3)) of this general permit. In such a case, a notation of "no discharge" shall be made on the SMR form.

Grab samples shall be used for all monitoring and shall not be combined. Collection of grab samples shall begin during the first thirty (30) minutes of a storm event discharge (flow at sampling location) and shall be completed as soon as possible. Samples shall be taken at the outfall or nearest feasible location representative of the discharge. The uncontaminated rainfall pH measurement shall also be taken, when required, at this time. All discharge samples at a facility must be taken during the same storm event, if feasible.

(B) Representative Discharge

When a facility has two or more outfalls that, based on a consideration of features (e.g. grass vs. pavement, slopes, catch basins vs. swales) and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one such outfall and report that the quantitative data is representative of the substantially identical outfalls.

The Plan shall include a narrative of the rationale for designating outfalls as representative discharges, and, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet), an estimate of the runoff coefficient of the drainage area and a description of the substantially identical activities contributing to the discharge shall be provided in the Plan. In no case shall one outfall test be substituted for more than five (5) outfalls.

(C) Storm Event Information

The following information shall be collected for the storm events monitored:

- (i) The date, discharge temperature, time of the start of the discharge, time of sampling, and magnitude (in inches) of the storm event sampled;
- (ii) The pH of the uncontaminated rainfall (before it contacts the ground); and
- (iii) The duration between the storm event sampled and the end of the most recent storm event that produced a discharge.

(D) Test Procedures

- (i) Unless otherwise specified in this permit, all pollutant parameters shall be tested according to methods prescribed in Title 40, Code of Federal Regulations (CFR), Part 136. Laboratory analyses must be consistent with Connecticut Reasonable Confidence Protocols.
- (ii) Acute toxicity biomonitoring tests shall be conducted according to the procedures specified in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th edition (EPA 821-R-02-012). The following specific conditions apply:
 - Tests shall employ neonatal (less than 24-hour-old) *Daphnia pulex* as test organisms;
 - Tests shall be conducted at 20 +/- 1 degrees Centigrade;
 - Tests shall be forty-eight (48) hours in duration;
 - Synthetic freshwater prepared as described in EPA 821-R-02-012 and adjusted to a hardness of 50 +/-5 mg/l as CaCO₃ shall be used as dilution water in all tests;
 - The sample shall not be hardness or pH adjusted or altered in any way;
 - The following test dilution series shall be utilized, expressed as percent stormwater sample: 100%, 50%, 25%, 12.5%, 6.25% and 0%;
 - A minimum of twenty test organisms shall be exposed to each stormwater concentration, with each test concentration containing a minimum of four (4) test chambers. Each test chamber shall contain a minimum of five (5) test organisms;
 - Test organisms shall not be fed during the test period;

- Test results shall be reported as the LC50 value determined using the procedure specified in EPA 821-R-02-012;
- Hardness in the stormwater sample and in the dilution control water shall be reported as mg/L as CaCO₃;
- Toxicity tests shall be initiated within thirty-six (36) hours of stormwater sample collection; and
- Any test in which the survival of test organisms is less than 90% in the
 combined control test vessels or failure to achieve test conditions as
 specified, such as maintenance of environmental controls, shall constitute an
 invalid test and will require stormwater resampling and retesting as soon as
 practicable.

(E) Inability to Collect a Sample

If a permittee is unable to collect a sample pursuant to "Visual Monitoring" (Section 5(e)(1)(A)(i)) or "Additional Requirements for Certain Sectors" (Section 5(f)) due to the inability to meet the conditions in subsection (A) above, the permittee shall, for visual monitoring, document such inability in their Plan or, for all other monitoring, submit the Stormwater Monitoring Report form in accordance with the "Reporting Requirements" section (Section 5(h)(3)) with a notation of "no discharge" and an explanation of the limitations restricting the collection of an appropriate sample. Reasons may include the absence of a 72-hour period of dry weather, the absence of a rain event that produces a stormwater discharge, the absence of a discharge from a detention or retention basin in accordance with subsection (A) above, or safety considerations preventing access to a stormwater discharge location. Timing of a rain event is not an acceptable reason to fail to sample unless it precludes the analysis of a parameter within the acceptable hold time specified by a laboratory.

(f) Additional Requirements for Certain Sectors

(1) Sector A – Asphalt Plants

This sector applies to those facilities categorized as SIC Codes 2911 and 2951 that manufacture asphalt paving mixtures and other bituminous road materials. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Monitoring Requirements

In addition to the semiannual monitoring required in "Monitoring" (Section 5(e)), the permittee must sample this parameter semiannually under the same conditions as those required in Section 5(e):

Semivolatile Hydrocarbons

Analysis of this parameter shall be conducted using EPA Method 625.

(B) Sector-specific Benchmarks

Facilities monitoring under the requirements of this sector shall not be subject to a Benchmark requirement for Semivolatile Hydrocarbons. These facilities must monitor semiannually for this parameter for the entire term of the permit.

(C) Effluent Limitations

The following effluent limits <u>apply only to asphalt emulsion facilities</u> (within SIC code 2911). These parameters must be monitored once a year for the term of the permit. Monitoring for these parameters may be conducted concurrently with any other monitoring required in this general permit. Exceedance of any effluent limit is a violation of the general permit.

<u>Parameter</u>	Effluent Limitation
Oil & Grease (mg/l)	15
Sample pH	6-9
Total Suspended Solids (mg/l)	23

(2) Sector B – Non-metallic Mines and Quarries (SIC Code 14) and Stone Cutting (SIC Code 3281)

This sector applies to those facilities categorized as SIC Major Group 14 that mine sand, gravel, stone, clay and other non-metallic minerals as well as those facilities that cut and shape stone products classified as SIC Code 3281. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Requirements for Authorization

Mine dewatering discharges are not authorized by this general permit.

(B) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Additional Sediment and Erosion Control

The permittee must implement erosion and sediment control measures for any areas with the potential to impact surface waters or wetlands or the potential for off-site impacts by following the Guidelines and the Stormwater Quality Manual.

(ii) Dust Suppression

The permittee must ensure that off-site vehicle tracking of sediments and the generation of dust shall be minimized. Dust suppression measures shall be utilized on any activity that causes airborne particles, in accordance with section 22a-174-18(c) of the Regulations of Connecticut State Agencies. The volume of water sprayed to control dust shall be minimized to prevent runoff to the surface waters of the State.

(iii) Run-on Diversion

The permittee shall, where feasible, divert uncontaminated stormwater run-on away from potential pollutant sources by means of interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

(C) Additional Plan Requirements

In addition to the Plan requirements specified in "Stormwater Pollution Prevention Plan" (Section 5(d)), the permittee must include the following additional elements in their Plan:

(i) Nature of Industrial Activities

The permittee must document in the Plan the mining and associated activities that can potentially affect the stormwater discharges covered by this permit, including a general description of the location of the site relative to major transportation routes and communities.

(ii) Site Map

The permittee must document in the Plan the locations of the following (as appropriate): mining or milling site boundaries; access and haul roads; outline of the drainage areas of each stormwater outfall within the facility with information on the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an NPDES permit, outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of all stormwater discharges; location of mine drainage dewatering or other process water; off-site points of discharge for mine dewatering and process water; surface waters; and location(s) of reclaimed areas.

(iii) Potential Pollutant Sources

For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, the permittee must document in the Plan the types of pollutants (e.g., heavy metals, sediment) likely to be present. Consider these factors: the mineralogy of the waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced, or discharged; the use of blasting materials; the likelihood of contact with stormwater; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing waste rock or overburden characterization data and test results for potential generation of acid rock drainage.

(iv) Stormwater Controls

The permittee shall document any of the control measures in subsection (B), above, in the Plan pursuant to Section 5(c)(2)(E). If control measures are implemented or planned but are not listed in subsection (B) (e.g., substituting a less toxic chemical for a more toxic one), the permittee shall include descriptions of them in the Plan.

(3) Sector C – Refuse Systems (SIC Code 4953)

This sector applies to those facilities categorized as SIC Code 4953 and are included in Category 5 of the definition of Industrial Activity in Section 2 of this general permit. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur and where waste and/or leachate are exposed or potentially exposed to rainfall. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Requirements for Authorization

The following discharges are not authorized by this permit: landfill leachate; gas collection condensate; drained free liquids; contaminated ground water; laboratory wastewater; and rinse- or wash-water from washing trucks, railcar exteriors, equipment, paved areas or building surfaces.

(B) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Preventive Maintenance Program

As part of the preventive maintenance program in Section 5(b)(8), the permittee must maintain all elements of leachate collection and treatment systems to prevent commingling of leachate with stormwater and the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary) to minimize the effects of settlement, sinking, and erosion. For transfer stations, the permittee must maintain the integrity and effectiveness of all collection containers, collection systems for white goods and other waste material storage areas, and systems to contain pollutants and minimize exposure to rainfall and runoff.

(ii) Erosion and Sedimentation Control

The permittee must provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following: materials stockpiled for daily, intermediate, and final landfill cover; inactive areas of a landfill or open dump; landfills or open dump areas that have received final cover but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.

(C) Additional Plan Requirements

In addition to the Plan requirements specified in "Stormwater Pollution Prevention Plan" (Section 5(d)), the permittee must include the following additional elements in their Plan:

(i) Drainage Area Site Map

The permittee must document in the Plan where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches; active and closed land application areas; locations where open dumping is occurring or has occurred; locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff; leachate collection and handling systems; and transfer station waste storage areas, hoppers, and waste loading or transfer areas.

(ii) Summary of Potential Pollutant Sources

The permittee must document in the Plan the following sources and activities, as well as any others, that have the potential to contribute pollutants to stormwater runoff: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading or unloading; outdoor storage of materials, including daily, interim, and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

(D) Additional Inspection Requirements

In addition to the requirements of "Inspections" (Section 5(d)), the permittee shall comply with these additional inspection requirements:

(i) Inspections of Active Landfills

The permittee must inspect operating landfills, open dumps, and land application sites at least once every 7 days. A qualified inspector shall focus on areas of landfills that have not yet been finally stabilized; active land application areas, areas used for storage of material and wastes that are exposed to precipitation, stabilization, and structural control measures; leachate collection and treatment systems; and locations where equipment and waste trucks enter and exit the site. Ensure that sediment and erosion control measures are operating properly. For stabilized sites and areas where land application has been completed and vegetation established, conduct inspections at least once every month.

(ii) Inspections of Inactive Landfills

The permittee must inspect inactive landfills, open dumps, and land application sites at least quarterly. Qualified personnel must inspect landfill (or open dump) stabilization and structural erosion control measures, leachate collection and treatment systems, and all closed land application areas.

(iii) Inspections of Transfer Stations and Recycling Facilities

The permittee must inspect transfer stations at least once every 7 days. A qualified inspector shall focus on areas of used for storage of material and wastes that are exposed to precipitation, locations where equipment and waste trucks enter and exit the site, and areas where waste and materials are loaded and unloaded. Additionally, the permittee shall conduct a daily site "walk-through" for litter focusing on the site perimeter, cover of waste containers, and areas the public has access for waste disposal or recycling drop-off.

(E) Additional Monitoring Requirements

In addition to the semiannual monitoring required in "Monitoring" (Section 5(e)), for municipal and regional landfills and all other solid waste disposal areas, the permittee must sample this parameter <u>quarterly</u> under the same conditions as those required in Section 5(e):

Total Iron (mg/l)

(F) Sector-specific Benchmarks

In addition to the Benchmarks specified in "Monitoring" (Section 5(e)), for municipal and regional landfills and all other solid waste disposal areas, the following Benchmark shall apply to the monitoring parameter required in subparagraph E, above, and be subject to the requirements in "Benchmarks" (Section 5(e)(1)(B)(ii)):

Parameter Benchmark
Total Iron (mg/l) 1.0

(G) Effluent Limitations

For municipal and regional landfills and all other solid waste disposal areas, compliance with the following effluent limits is required for this general permit. These parameters must be monitored once a year for the term of the permit. Monitoring for these parameters may be conducted concurrently with any other monitoring required in this general permit. Exceedance of any effluent limit is a violation of the general permit.

<u>Parameter</u>	Effluent Limit
Biochemical Oxygen Demand (mg/)	140
Total Suspended Solids (mg/l)	88
Ammonia (mg/l)	10
Alpha Terpineol (mg/l)	0.033
Benzoic Acid (mg/l)	0.12
p-Cresol (mg/l)	0.025
Phenol (mg/l)	0.026
Total Zinc (mg/l)	0.200
pH	6-9

(H) Additional Reporting and Recordkeeping Requirements

In addition to the requirements of "Reporting and Recordkeeping" (Section 5(h)), the permittee must keep records with the Plan of the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track the types and quantities of wastes applied in specific areas.

(4) Sector D – Auto Salvage Yards (SIC Code 5015)

This sector applies to those facilities categorized as SIC Code 5015 and are included in Category 6 of the definition of Industrial Activity in Section 2 of this general permit. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Spill and Leak Prevention Procedures

The permittee must drain vehicles and mechanical equipment intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means to prevent spills and leaks. The permittee must conduct dismantling activities on a covered impermeable surface and employ impermeable containment measures for any uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage. Disposal of stormwater collected within the containment areas shall be conducted in accordance with the "Spill Prevention and Response Procedures" section (Section 5(b)(9)(A)) of this general permit.

(ii) Employee Training

The permittee shall address, if applicable, the following areas (at a minimum) in the employee training program: proper handling (collection, storage, and disposal) of oil, gasoline, diesel fuel, used mineral spirits, anti-freeze, mercury switches, solvents and any other automotive fluids.

(iii) Management of Runoff

The permittee shall consider the following management practices: berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); installation of detention ponds; and installation of filtering devices and oil and water separators.

(B) Additional Plan Requirements

In addition to the Plan requirements specified in "Stormwater Pollution Prevention Plan" (Section 5(d)), the permittee must include the following additional elements in their Plan:

(i) Drainage Area Site Map

The permittee shall identify locations used for dismantling, storage, and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or surface runoff: dismantling areas, parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas, and liquid storage tanks and drums for fuel and other fluids.

(ii) Potential Pollutant Sources

The permittee must assess the potential for the following to contribute pollutants to stormwater discharges: vehicle storage areas, dismantling areas, parts storage areas (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers), areas where vehicle fluids are drained, and fueling stations.

(C) Additional Inspection Requirements

The permittee must immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks. Inspect at least quarterly for signs of leakage all equipment containing oily parts, hydraulic fluids, any other types of fluids, or mercury switches. Also, inspect at least quarterly for signs of leakage all vessels and areas where hazardous materials and general automotive fluids are stored, including, but not limited to, mercury switches, brake fluid, transmission fluid, radiator water, and antifreeze.

(D) Additional Monitoring Requirements

(i) Quarterly Monitoring

In addition to the semiannual monitoring required in "Monitoring" (Section 5(e)), the permittee must sample these parameters <u>quarterly</u> under the same conditions as those required in Section 5(e):

Total Iron (mg/l) Total Mercury (mg/l) Total Aluminum (mg/l)

(ii) Semiannual Monitoring

In addition to the semiannual monitoring required in "Monitoring" (Section 5(e)) and the quarterly sampling in subparagraph (i), above, the permittee must sample these parameters <u>semiannually</u> under the same conditions as those required in Section 5(e):

Semivolatile Hydrocarbons

Analysis of this parameter shall be conducted using EPA Method 625.

(E) Sector-specific Benchmarks

(i) Quarterly Monitoring

In addition to the Benchmarks specified in "Monitoring" (Section 5(e)), the following Benchmarks shall apply to the monitoring parameters required in subparagraph A, above, and be subject to the requirements in "Benchmarks" (Section 5(e)(1)(B)(ii)):

<u>Parameter</u>	Benchmark
Total Iron (mg/l)	1.0
Total Mercury (mg/l)	0.0014
Total Aluminum (mg/l)	0.75

(ii) Semiannual Monitoring

Facilities monitoring under the requirements of this sector shall not be subject to a Benchmark requirement for Semivolatile Hydrocarbons. These facilities must monitor semiannually for this parameter for the entire term of the permit.

(5) Sector E – Scrap Recycling Facilities (SIC Code 5093)

This sector applies to those facilities categorized as SIC Code 5093 and are included in Category 6 of the definition of Industrial Activity in Section 2 of this general permit. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Requirements for Authorization

Non-stormwater discharges from turnings or other containment areas are not authorized by this general permit. Disposal of stormwater collected within the containment areas shall be conducted in accordance with the "Spill Prevention and Response Procedures" section (Section 5(b)(9)(A)) of this general permit.

(B) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Inbound Recyclable and Waste Material Control Program

The permittee must minimize the acceptance of materials that could be sources of pollutants by conducting inspections of inbound recyclables and waste materials. The following are some possible control measure options: (a) provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to the facility; (b) establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; (c) establish procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage, and disposal or recycling of batteries are

contained in the scrap lead-acid battery program provisions in subparagraph (vi) below; (d) provide training for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and (e) establish procedures to ensure that liquid wastes, including used oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).

(ii) Outdoor Scrap and Waste Material Stockpiles and Storage

The permittee must minimize contact of stormwater runoff with stockpiled materials, processed materials, and nonrecyclable wastes. The following are some possible control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing to prevent sediment transport; (e) any treatment or other measures necessary to minimize the discharge of water-soluble pollutants such as coolants or oils; and (f) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).

(iii) Outdoor Stockpiling of Turnings Exposed to Cutting Fluids

The permittee must minimize contact of surface runoff with residual cutting fluids by: (a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, and/or (b) establishing dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with stormwater run-on. Stormwater runoff from these areas can be discharged, provided that the cutting fluids are not water soluble and that any runoff is first collected and treated by an oil and water separator or its equivalent. The permittee must regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids. Stormwater containing water soluble cutting fluids may not be discharged and must be collected and disposed of appropriately.

(iv) Covered Scrap and Waste Material Stockpiles and Storage

The permittee must minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. The permittee shall implement the following control measures: (a) good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; and (c) disconnecting or sealing off all floor drains connected to the storm sewer system.

(v) Scrap and Recyclable Waste Processing Areas

The permittee must minimize surface runoff from coming in contact with scrap processing equipment. Particular attention shall be paid to operations that

generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (i.e., through good housekeeping, preventive maintenance, etc.). Following are some required control measures: (a) regularly inspect equipment for spills or leaks and malfunctioning, worn, or corroded parts or equipment; (b) establish a preventive maintenance program for processing equipment; (c) use dry absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches; (d) on unattended hydraulic fluid reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices, and provide secondary containment in compliance with Section 5(b)(9)(A); (e) containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of stormwater runoff with outdoor processing equipment or stored materials; (f) oil and water separators or sumps; (g) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (h) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); (i) catch basin filters or sand filters.

(vi) Scrap Lead-Acid Battery Program

The permittee must properly handle, store, and dispose of scrap lead-acid batteries. The permittee shall implement the following control measures (a) segregate scrap lead-acid batteries from other scrap materials; (b) properly handle, store, and dispose of cracked or broken batteries; (c) collect and dispose of leaking lead-acid battery fluid; (d) minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; and (e) provide employee training for the management of scrap batteries.

(vii) Spill Prevention and Response Procedures

The permittee shall install alarms and/or pump shutoff systems on outdoor equipment with hydraulic fluid reservoirs exceeding 150 gallons in the event of a line break. Compliance with the containment provisions in Section 5(b)(9)(A) shall also be maintained. Use a mercury spill kit for any release of mercury from switches, anti-lock brake systems, and switch storage areas.

(viii)Supplier Notification Program

As appropriate, the permittee shall notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions. Any such restrictions shall be identified in the Plan.

(C) Additional Plan Requirements

In addition to the Plan requirements specified in "Stormwater Pollution Prevention Plan" (Section 5(d)), the permittee must include the following additional elements in their Plan:

(i) Drainage Area Site Map

The permittee shall document in the Plan the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff:

scrap and waste material storage, outdoor scrap and waste processing areas or equipment; and containment areas for turnings exposed to cutting fluids.

(ii) Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities

If the permittee has outdoor stockpiles with cutting fluids subject to Section 5(f)(5)(B)(iii) above, the Plan must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

(D) Additional Monitoring Requirements

(i) Quarterly Monitoring

In addition to the semiannual monitoring required in "Monitoring" (Section 5(e)), the permittee must sample these parameters <u>quarterly</u> under the same conditions as those required in Section 5(e):

Total Iron (mg/l)
Total Mercury (mg/l)
Total Aluminum (mg/l)

(ii) Semiannual Monitoring

In addition to the semiannual monitoring required in "Monitoring" (Section 5(e)) and the quarterly sampling in subparagraph (i), above, the permittee must sample these parameters <u>semiannually</u> under the same conditions as those required in Section 5(e):

Semivolatile Hydrocarbons Polychlorinated Biphenyls (PCBs)

Analysis of semivolatile hydrocarbons shall be conducted using EPA Method 625.

(E) Sector-specific Benchmarks

(i) Quarterly Monitoring

In addition to the Benchmarks specified in "Monitoring" (Section 5(e)), the following Benchmarks shall apply to the monitoring parameters required in subparagraph A, above, and be subject to the requirements in "Benchmarks" (Section 5(e)(1)(B)(ii)):

<u>Parameter</u>	<u>Benchmark</u>
Total Iron (mg/l)	1.0
Total Mercury (mg/l)	0.0014
Total Aluminum (mg/l)	0.75

(ii) Semiannual Monitoring

Facilities monitoring under the requirements of this sector shall not be subject to Benchmark requirements for Semivolatile Hydrocarbons or PCBs. These facilities must monitor semiannually for these parameters for the entire term of the permit.

(6) Sector F – Steam Electric Power Generation (SIC Code 4911)

This sector applies to those facilities that are categorized as SIC Code 4911 and are included in Category 7 of the definition of Industrial Activity in Section 2 of this general permit. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Fugitive Dust Emissions

The permittee shall minimize fugitive dust emissions from coal handling and storage areas. To minimize the tracking of coal dust offsite, the following are possible control measures: installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water; locating coal handling areas, whether accessed by rail or road access, within a building or under a roof and provide measures to minimize tracking from these areas; maintaining a removable or permanent cover over coal storage areas.

(ii) Water-based Coal Unloading Areas

The permittee shall minimize contamination of precipitation or surface runoff in vessel, pier and shoreside coal unloading areas as well as spillage and airborne dust from coal transfer operations resulting in direct discharge to adjacent watercourses. The following are possible control measures: using containment curbs in these areas; having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any spillage is immediately contained and cleaned up; and using spill and overflow protection devices (e.g., conveyor pans and covers).

(iii) Land-based Fuel Oil Unloading Areas

The permittee shall minimize contamination of precipitation or surface runoff from fuel oil unloading areas. The following are possible control measures: using containment curbs in unloading areas; having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up; and using spill and overflow protection devices (e.g., drip pans, drip diapers, absorbent pads, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

(iv) Water-based Fuel Oil Unloading Areas

The permittee shall minimize contamination of precipitation or surface runoff from vessel, pier and shoreside fuel oil unloading areas. The following are possible control measures: using containment curbs in unloading areas; having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up; and using spill and overflow protection devices (e.g., drip pans, drip diapers, absorbent pads, containment booms or other containment devices placed beneath fuel oil connectors to contain potential spillage during transfer.

(v) Large Bulk Fuel Storage Tanks

The permittee shall minimize contamination of surface runoff from large bulk fuel storage tanks by using containment berms (or their equivalent), where feasible. The permittee must also comply with the containment requirements of Section 5(b)(9)(A) as well as applicable State and Federal laws, including Spill Prevention, Control and Countermeasure (SPCC) Plan requirements.

(vi) Oil-Bearing Equipment in Switchyards

The permittee shall minimize contamination of surface runoff from oil-bearing equipment in switchyard areas. The following are possible control measures: using level grades and gravel surfaces to retard flows and limit the spread of spills; or collecting runoff in perimeter ditches.

(vii) Residue-Hauling Vehicles

The permittee must inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. The permittee must repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.

(viii) Ash Loading or Storage Areas

The permittee shall reduce or control the tracking of ash and residue from ash loading or storage areas. The permittee must clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.

(B) Additional Plan Requirements

The permittee shall document in the Plan the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).

(C) Additional Inspection Requirements

The permittee must inspect the following areas monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

(D) Additional Monitoring Requirements

In addition to the semiannual monitoring required in "Monitoring" (Section 5(e)), the permittee must sample this parameter <u>quarterly</u> under the same conditions as those required in Section 5(e):

Total Iron (mg/l)

(E) Sector-specific Benchmarks

In addition to the Benchmarks specified in "Monitoring" (Section 5(e)), the following Benchmark shall apply to the monitoring parameter required in subparagraph A, above, and be subject to the requirements in "Benchmarks" (Section 5(e)(1)(B)(ii)):

Parameter Benchmark
Total Iron (mg/l) 1.0

(F) Effluent Limitations

The following effluent limits apply only to steam electric power generation facilities with coal pile runoff. These parameters must be monitored once a year for the term of the permit. Monitoring for these parameters may be conducted concurrently with any other monitoring required in this general permit. Exceedance of any effluent limit is a violation of the general permit.

ParameterEffluent LimitationpH6-9Total Suspended Solids (mg/l)50

(7) Sector G – Transportation and Public Works Facilities

This sector applies to those facilities categorized as SIC Codes 40, 41, 42, 43, 44 (except 4493) and 45 as well as those facilities described as public works garages, all included in Category 8 of the definition of Industrial Activity in Section 2 of this general permit. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Vehicle and Equipment Storage

The permittee shall minimize the potential for stormwater exposure to leaky or leak-prone vehicles/equipment awaiting maintenance. The following are possible control measures: use of drip pans under vehicles/equipment; indoor storage of vehicles and equipment; installation of berms or dikes; use of absorbents; roofing or covering storage areas; and cleaning pavement surfaces to remove oil and grease (with proper washwater disposal).

(ii) Fueling Areas

The permittee shall minimize contamination of stormwater runoff from fueling areas. The following are possible control measures: covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing stormwater run-on/runoff to the fueling area; using dry cleanup methods; providing spill kits and catch basin covers nearby; and treating and/or recycling collected stormwater runoff.

(iii) Vehicle and Equipment Cleaning

The permittee must minimize contamination of stormwater runoff from all areas used for vehicle/equipment cleaning. The permittee must implement the following (or other equivalent measures): performing all cleaning operations indoors, where feasible; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the stormwater drainage system); treating and/or recycling collected washwater, or discharging to sanitary sewer.

(iv) Vehicle and Equipment Maintenance

The permittee must minimize contamination of stormwater runoff from all areas used for vehicle/equipment maintenance. The permittee must implement the following (or other equivalent measures): performing maintenance activities indoors, where feasible; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to stormwater drainage systems; using dry cleanup methods; treating and/or recycling collected stormwater runoff, minimizing run on/runoff of stormwater to and from maintenance areas.

(v) Employee Training

The permittee shall train personnel within 90 days of employment and at least once a year in accordance with "Control Measures" (Section 5(b)) and address the following activities, as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

(vi) Liquid De-Icing Material Storage

The permittee shall provide that containers for liquid de-icing materials constructed or modified after the effective date of this general permit must be constructed with impermeable secondary containment which will hold at least 110% of the volume of the container without overflow from the containment area.

For storage containers for liquid de-icing materials installed prior to the effective date of this general permit, the permittee shall identify containment control measures as part of the storm water pollution prevention plan (Plan) on or before one (1) year from the effective date of this permit. Containment control measure options may include but are not limited to: regularly inspect equipment for spills or leaks and malfunctioning, worn or corroded parts of equipment; establish a preventative maintenance program; use dry absorbents or other cleanup practices to collect spills or leaks; install protection devices such as low level alarms or equivalent devices; implement containment or diversion

structures to prevent spills or leaks from entering a storm drainage system; use drainage control and other diversionary structures (dikes, impermeable berms, curbing, pits).

Additionally, on or before one (1) year from the effective date of this general permit, permittees with liquid de-icing storage containers lacking the containment volume required in this subsection that were installed prior to the effective date of this general permit shall submit to the commissioner a plan and implementation schedule for the installation of secondary containment measures on those containers. Such plan shall provide information on the costs associated with providing secondary containment measures at each site and a site priority list for the installation of these measures.

(vii) Aircraft De-Icing Operations

Where aircraft de-icing is conducted, the permittee shall determine the seasonal timeframe during which deicing activities typically occur at the facility. Implementation of control measures, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season. If the permittee meets the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea, the permittee must conduct at least one of the required benchmark monitoring events (pursuant to Section 5(e)) during the deicing season and include the deicing-related parameters identified in subsection D, below (i.e., BOD, COD, and ammonia).

Where deicing operations occur, the permittee must implement a program to control or manage contaminated runoff to minimize the amount of pollutants discharged. The permittee shall implement these control measure options (or their equivalents), as appropriate: a dedicated deicing facility with a runoff collection/recovery system; using vacuum/collection trucks; storing contaminated stormwater/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; and directing runoff into vegetative swales or other infiltration measures. The permittee must also recover deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.

(B) Additional Plan Requirements

(i) Drainage Area Site Map

The permittee must identify in the Plan the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff:

- Fueling stations;
- vehicle/equipment maintenance or cleaning areas;
- storage areas for vehicle/equipment with actual or potential fluid leaks;
- loading/unloading areas;
- areas where treatment, storage or disposal of wastes occur;
- aircraft de-icing areas;
- liquid storage tanks (including liquid de-icing and anti-icing materials);

- processing areas; and
- storage areas.

(ii) Potential Pollutant Sources

The permittee shall assess the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: Onsite waste storage or disposal; dirt/gravel parking areas for vehicles awaiting maintenance; illicit plumbing connections between interior floor drains and the stormwater conveyance system(s); aircraft de-icing material storage and application areas; and fueling areas. Describe these activities in the Plan.

(iii) Description of Good Housekeeping Measures

The permittee must document in the Plan the good housekeeping measures implemented consistent with "Additional Control Measures" (Section 5(f)(7)(A)), above.

(iv) Vehicle and Equipment Washwater Requirements

If applicable, the permittee shall attach to or reference in the Plan, a copy of the NPDES permit issued for vehicle washwater or, if an NPDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, the permittee shall attach a copy to the Plan. In any case, implement all non-stormwater discharge permit conditions or pretreatment conditions in the Plan. If washwater is handled in another manner (e.g., hauled offsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in the Plan.

(C) Additional Inspection Requirements

The permittee shall inspect all the following areas/activities: storage areas for vehicles/equipment awaiting maintenance, fueling areas, indoor and outdoor vehicle/equipment maintenance areas, material storage areas, vehicle/equipment cleaning areas; aircraft de-icing areas; and loading/unloading areas.

(D) Additional Monitoring Requirements

In addition to the parameters required in "Monitoring" (Section 5(e)), the permittee must sample any additional parameters required in this subsection under the same conditions as those required in Section 5(e), unless otherwise specified in this subsection:

(i) Additional Parameters for Aircraft De-Icing

(a) Large Airports

Air transportation facilities (SIC Code 45) conducting aircraft de-icing utilizing more than 100,000 gallons glycol and/or 100 tons of urea shall monitor their stormwater discharges twice during the deicing season (as defined in Section 5(f)(7)(A)(vii) above) for the following parameters, if in use:

BOD (mg/l) Urea (mg/l) Propylene Glycol (mg/l) Ethylene Glycol (mg/l)

At least one of the two required sampling events shall be conducted concurrently with one of the semiannual sampling events conducted pursuant to "Monitoring Requirements" (Section 5(e)). For air transportation facilities with stormwater discharges from areas where aircraft deicing operations occur (including departure gates, dedicated aircraft deicing stations and any other areas where aircraft deicing occurs), monitoring shall be performed, where practicable, during or immediately following deicing operations when there is a discharge and samples shall be collected in such a manner that they are representative of stormwater quality resulting from deicing operations.

(b) Small Airports

Air transportation facilities (SIC Code 45) conducting aircraft de-icing utilizing less than 100,000 gallons glycol and/or 100 tons of urea shall monitor their stormwater discharges for the parameters required by "Monitoring" (Section 5(e)) once per year during the deicing season (as defined in Section 5(f)(7)(A)(vii) above). Additionally, stormwater discharges must be monitored for the following parameters, if in use, once a year for the first two years of the permit term, regardless of the amounts used:

BOD (mg/l) Urea (mg/l) Propylene Glycol (mg/l) Ethylene Glycol (mg/l)

For air transportation facilities with stormwater discharges from areas where aircraft deicing operations occur (including departure gates, dedicated aircraft deicing stations and any other areas where aircraft deicing occurs), monitoring shall be performed, where practicable, during or immediately following deicing operations when there is a discharge and samples shall be collected in such a manner that they are representative of stormwater quality resulting from deicing operations.

(ii) Additional Parameters for Federal, State, or Municipal Facilities with Incidental Solid De-Icing Material Storage

In addition to the general monitoring requirements specified in Section 5(e)(1)(A)(ii) and subject, as applicable, to the conditions for DOT facilities in subparagraph (iv) below, for facilities in this sector that have solid de-icing material storage on-site in conjunction with other activities, a sample shall be taken of a discharge that is representative of the quality of runoff from the deicing storage activity. Such sample shall also include the following parameters:

Chloride (mg/l) Cyanide (mg/l) If the discharge location for this sample is already included in the facility's general monitoring program, these additional parameters may be included in that sample. Such facilities shall continue to monitor these additional parameters for the first two years of the permit term (four samples) and shall conduct visual monitoring pursuant to the requirements of "Visual Monitoring" (Section 5(e)(1)(A)(i)) for the entire term of the permit.

(iii) Monitoring Requirements for Federal, State, or Municipal Facilities Consisting Solely of Solid De-Icing Material Storage

Industrial activities in this sector that consist solely of solid de-icing material storage with no other industrial activities on-site shall not be required to monitor for the parameters or conditions in subsections 5(e)(1)(A) - (C) of the "Monitoring Requirements" section.

(iv) Department of Transportation Repair and Maintenance Facilities

The Department of Transportation shall sample all of its repair facilities and maintenance facilities (those facilities that conduct repair and/or maintenance on DOT vehicles) for the parameters in "General Monitoring Requirements" (Section 5(e)(1)(A)(ii)) and, as applicable, those parameters included in subparagraph (ii) above <u>at least once</u> during the term of this general permit. These facilities are otherwise exempt from the additional semiannual monitoring requirements of that section. Such facilities shall continue to conduct visual monitoring pursuant to the requirements of "Visual Monitoring" (Section 5(e)(1)(A)(i)).

(E) Sector-specific Benchmarks

In addition to the Benchmarks specified in "Monitoring" (Section 5(e)), the following Benchmarks shall apply to the additional monitoring parameters required in subparagraph D, above, and be subject to the requirements in "Benchmarks" (Section 5(e)(1)(B)(ii)):

(i) Additional Benchmarks for Aircraft De-Icing

(a) Large Airports

Facilities monitoring under the requirements of subparagraph (D)(i)(a) above shall not be subject to Benchmark requirements for BOD, Urea, Propylene Glycol or Ethylene Glycol. These facilities must monitor under the conditions of that subparagraph for these parameters for the entire term of the permit.

(b) Small Airports

Facilities monitoring under the requirements of subparagraph (D)(i)(b) above shall not be subject to Benchmark requirements for BOD, Urea, Propylene Glycol or Ethylene Glycol. Such facilities must monitor for these parameters under the conditions specified in that subparagraph for the first two years of the permit. For their monitoring under "General Monitoring Requirements" (Section 5(e)(1)(A)(ii)), as modified by

subparagraph (D)(i)(b) above, these facilities shall be subject to the Benchmarks of Section 5(e)(1)(B)(ii) after each annual monitoring event rather than an average of four semiannual events.

(ii) Additional Benchmarks for Federal, State, or Municipal Facilities with Incidental Solid De-Icing Material Storage

Facilities monitoring under the requirements of subparagraph (D)(ii) above shall not be subject to Benchmark requirements for Chloride or Cyanide.

(iii) Additional Benchmarks for Federal, State, or Municipal Facilities Consisting Solely of Solid De-Icing Material Storage

Facilities monitoring under the requirements of this sector are not required to sample and shall not be subject to Benchmark requirements.

(iv) Department of Transportation Repair and Maintenance Facilities

Department of Transportation repair and maintenance facilities shall not be subject to the requirements of the "Standard Monitoring Benchmarks" subsection (Section 5(e)(1)(B)) to conduct additional sampling based on Benchmarks. However, for those facilities that exceed one or more benchmarks for their sampling event, the permittee shall review the selection, design, installation and implementation of the control measures to determine if modifications are necessary to meet the benchmark(s) and make the necessary modifications to the control measures and Plan for all such facilities. Such facilities shall also continue to conduct visual monitoring pursuant to the requirements of "Visual Monitoring" (Section 5(e)(1)(A)(i)).

(8) Sector H – Marinas, Yacht Clubs and Boat Dealers (SIC Codes 4493, certain 7997 and 5551)

This sector applies to those facilities categorized as SIC Code 4493 and are included in Category 8 of the definition of Industrial Activity in Section 2 of this general permit. This sector also includes yacht clubs (within SIC Code 7997) and boat dealers (SIC Code 5551). The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Requirements for Authorization

Non-stormwater discharges from sanitary wastes and pressure wash water originating from vessels are not authorized by this permit. Discharges from non-pressure washing, bilge water, ballast water and cooling water originating from recreational vessels up to eighty (80) feet in length may be discharged as they are considered to be incidental to the normal operation of a recreational vessel.

(B) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Pressure Washing Discharges

If pressure washing (or other means of washing) is used to remove marine growth from vessels, the permittee must follow the pressure washing guidance in the Connecticut Clean Marina Guidebook, as amended. The discharge of these washwaters is not authorized by this general permit. The discharge of these waters is deemed under the Clean Water Act to be a process wastewater and must be collected and discharged to sanitary sewer under a separate permit or pumped and hauled by a licensed waste hauler.

(ii) Non-Pressure Washing Discharges

The conditions in subparagraph (i), above, do not apply to non-pressure washing discharges incidental to the normal operation of a recreational vessel.

(iii) Blasting and Paint Spraying

If abrasive blasting of vessels or equipment is conducted on-site, the permittee must follow the abrasive blasting guidance in the Connecticut Clean Marina Guidebook, as amended. The permittee shall minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. The permittee shall contain all blasting and paint spraying activities to minimize the discharge of contaminants either by hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris or by conducted such operations inside with appropriate containment measures. Stormwater conveyances within the drainage area of these operations shall be inspected at the end of each day of blasting and cleaned of deposits of abrasive blasting debris and paint chips if necessary. When feasible, blasting media should be recycled.

(iv) Material Storage

The permittee shall store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. The permittee shall minimize the contamination of precipitation or surface runoff from the storage areas. The permittee shall specify where materials are stored and provide containment as specified in "Containment" (Section 5(b)(9)(A)). If abrasive blasting is performed, the Plan shall discuss the storage and disposal of spent abrasive materials generated at the facility.

(v) Engine Maintenance and Repair

The permittee shall implement the following (or their equivalents), as appropriate: performing engine maintenance and repair activities indoors, when feasible; maintaining an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting the practice of hosing down the shop floor; using dry cleanup methods; and treating and/or recycling stormwater runoff collected from the maintenance area. No engine fluids, cleaning solvents, paint, scale, rust, oil and grease, or other contaminants resulting from maintenance or repair activities may be discharged to ground, storm sewer or receiving water. Such materials shall be collected and properly disposed.

(vi) Material Handling

The permittee shall minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). The permittee shall consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of stormwater to material handling areas.

(vii) Employee Training

As part of the employee training program, the permittee shall address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, pressure washing procedures, engine maintenance and repair procedures, zinc anode disposal and used battery and management.

(C) Additional Plan Requirements

(i) Drainage Area Site Map

The permittee shall document in the Plan where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

(ii) Summary of Potential Pollutant Sources

The permittee shall document in the Plan the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

(D) Additional Inspection Requirements

The permittee shall also inspect the following areas of the site monthly: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area. At least quarterly and as necessary, the permittee shall perform inspection of stormwater management devices (e.g., oil and water separators, sediment traps or chambers, pressure wash collection systems), as well as inspecting and/or testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

(E) Additional Monitoring Requirements

In addition to the semiannual monitoring required in "Monitoring" (Section 5(e)), the permittee must sample these parameters <u>semiannually</u> under the same conditions as those required in Section 5(e):

Total Iron (mg/l)
Total Aluminum (mg/l)

(F) Sector-specific Benchmarks

In addition to the Benchmarks specified in "Monitoring Requirements" (Section 5(e)), the following Benchmarks shall apply to the additional monitoring parameters required in subparagraph E, above, and be subject to the requirements in "Benchmarks" (Section 5(e)(1)(B)(ii)):

ParameterBenchmarkTotal Iron (mg/l)1.0Total Aluminum (mg/l)0.75

Facilities monitoring under the requirements of this sector shall not be subject to the Benchmark requirements for Total Copper specified in Sections 5(e)(1)(B)(ii), (iii) and (iv). These facilities must monitor semiannually for Total Copper for the entire term of the permit.

(9) Sector I – Ship and Boat Building and Repair (SIC Code 373)

This sector applies to those facilities categorized as SIC Industry Group 373 and included in Category 2 of the definition of Industrial Activity in Section 2 of this general permit. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Requirements for Authorization

Non-stormwater discharges from sanitary wastes and pressure wash water originating from vessels are not authorized by this permit. Discharges from bilge water, ballast water and cooling water originating from recreational vessels up to eighty (80) feet in length may be discharged as they are considered to be incidental to the normal operation of a recreational vessel..

(B) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Pressure Washing

If pressure washing (or other means of washing) is used to remove marine growth from vessels, the permittee must follow, where practicable, the pressure washing guidance in the Connecticut Clean Marina Guidebook, as amended. Where, for reasons of vessel size, location or configuration, these measures are not practicable, suitable alternative control measures shall be implemented. The discharge of these washwaters is not authorized by this general permit. The

discharge of these waters is deemed under the Clean Water Act to be a process wastewater and must be collected and discharged to sanitary sewer under a separate permit or pumped and hauled by a licensed waste hauler.

(ii) Non-Pressure Washing Discharges

The conditions in subparagraph (i), above, do not apply to non-pressure washing discharges incidental to the normal operation of a recreational vessel.

(iii) Blasting and Paint Spraying

If abrasive blasting of vessels or equipment is conducted on-site, the permittee must follow, where practicable, the abrasive blasting guidance in the Connecticut Clean Marina Guidebook, as amended. The permittee shall minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. The permittee shall contain, where practicable, all blasting and paint spraying activities to minimize the discharge of contaminants either by hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris or by conducted such operations inside with appropriate containment measures. Where, for reasons of vessel size, location or configuration, these measures are not practicable, suitable alternative control measures shall be implemented. Stormwater conveyances within the drainage area of these operations shall be inspected at the end of each day of blasting and cleaned of deposits of abrasive blasting debris and paint chips if necessary. Spent blasting media shall be collected and disposed in an appropriate manner dependent upon its composition. When feasible, blasting media should be recycled.

(iv) Material Storage

The permittee shall store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. The permittee shall minimize the contamination of precipitation or surface runoff from the storage areas. The permittee shall specify where materials are stored, and provide containment as specified in "Containment" (Section 5(b)(9)(A)). If abrasive blasting is performed, the Plan shall discuss the storage and disposal of spent abrasive materials generated at the facility.

(v) Engine Maintenance and Repair

The permittee shall implement the following (or their equivalents), as appropriate: performing engine maintenance and repair activities indoors, when feasible; maintaining an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting the practice of hosing down the shop floor; using dry cleanup methods; and treating and/or recycling stormwater runoff collected from the maintenance area. No engine fluids, cleaning solvents, paint, scale, rust, oil and grease, or other contaminants resulting from maintenance or repair activities may be discharged to ground, storm sewer or receiving water. Such materials shall be collected and properly disposed.

(vi) Material Handling

The permittee shall minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). The permittee shall consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of stormwater to material handling areas.

(vii) Drydock Activities

The permittee must routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. The permittee must clean accessible areas of the drydock prior to flooding. Upon flooding, removal of the vessel and raising the dock, the permittee shall conduct a final cleanup. Procedures shall be documented in the Plan and shall include training materials for cleaning up oil, grease, and fuel spills occurring on the drydock. Debris and spent blasting material should be swept rather than hosed off accessible areas of the drydock prior to flooding. If rinsing or washing is employed for cleanup, this material must be collected disposed of in accordance with DEP regulations and may not be discharged to the receiving water. During active drydock operations, absorbent materials and oil containment booms shall be readily available to clean up or contain any spills.

(viii)Employee Training

As part of the employee training program, the permittee shall address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, pressure washing procedures, engine maintenance and repair procedures, zinc anode disposal and used battery and management.

(C) Additional Plan Requirements

(i) Drainage Area Site Map

The permittee shall document in the Plan where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

(ii) Summary of Potential Pollutant Sources

The permittee shall document in the Plan the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

(iii) Blasting and Painting Areas

The permittee shall document in the plan any standard operating practices relating to blasting and painting (e.g., prohibiting uncontained blasting and

painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).

(iv) Storage Areas

The permittee shall specify in the Plan which materials are stored indoors which are stored outdoors, and how containment is provided in accordance with Section 5(b)(9)(A).

(D) Additional Inspection Requirements

The permittee shall also inspect the following areas of the site monthly: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area. At least quarterly and as necessary, the permittee shall perform inspection of stormwater management devices (e.g., oil and water separators, sediment traps or chambers, pressure wash collection systems), as well as inspecting and/or testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

(E) Sector-specific Benchmarks

Facilities in this sector shall not be subject to the Benchmark requirements for Total Copper specified in Sections 5(e)(1)(B)(ii), (iii) and (iv). These facilities must monitor semiannually for Total Copper for the entire term of the permit.

(10) Sector J – Small-Scale Composting Facilities

This sector applies to those facilities included in Category 14 of the definition of Industrial Activity in Section 2 of this general permit. The permittee must comply with these sector-specific requirements in those areas of the facility where these sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

(A) Additional Control Measures

In addition to the control measures specified in "Control Measures" (Section 5(b)), the permittee must implement the following additional control measures:

(i) Management of Runoff

Where composting operations are exposed to rainfall or runoff, the permittee must retain the runoff from the 25-year, 24-hour rainfall event.

(ii) Plan Submittal

For small-scale composting facilities composting horse manure and bedding, the Plan shall be submitted to the commissioner for review and approval with the completed registration in accordance with the "Contents of Registration" section (Section 4(c)).

(B) Additional Plan Requirements

(i) Site Map

The permittee shall indicate on the site map areas of the site where loading, unloading, mixing, hauling or placing of composting materials takes place.

(ii) Inventory of Exposed Materials

The permittee shall include in the Plan, a tabular inventory of the types and nature of materials composted or used in the composting operations that may be exposed to stormwater.

(iii) Composting Operations

The permittee shall document how the following criteria have been included in the design of the small-scale composting operations:

- Quantities of source materials to be composted;
- Origin of source materials to be composted;
- Target carbon-nitrogen ratio;
- Target moisture content;
- Mix ratios of source materials;
- Method for mixing materials;
- Equipment used in all phases of composting;
- Turning schedule;
- Temperature monitoring;
- Composting and curing times;
- Odor control;
- Area requirements; and
- End market for compost product.

(C) Alternate Monitoring Requirements

Small-scale composting facilities shall not be subject to the General Monitoring Requirements of Section 5(e)(1)(A)(ii) and shall instead conduct <u>annual</u> sampling of the parameters listed below, <u>when and if there is a discharge from the retention system</u>, commencing upon the effective date of this general permit, and annually thereafter as conditions allow.

COD (mg/l) Total Phosphorus (mg/l) Total Kjeldahl Nitrogen (mg/l) Nitrate as Nitrogen (mg/l) Total Suspended Solids (mg/l)

(D) Sector-specific Benchmarks

The following Benchmarks shall apply to the monitoring parameters required in subparagraph C, above, and be subject to the requirements for data exceeding and not exceeding Benchmarks in the "Benchmarks" section (Section 5(e)(1)(B)(iii) and (iv)):

<u>Parameter</u>	<u>Benchmark</u>
COD (mg/l)	75
Total Phosphorus (mg/l)	0.40
Total Kjeldahl Nitrogen (mg/l)	2.30
Nitrate as Nitrogen (mg/l)	1.10
Total Suspended Solids (mg/l)	90

(g) Discharges to Impaired Waters

The DEP has established an EPA-approved list of "impaired waters" pursuant to Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report. These are waters that have been assessed as not meeting Water Quality Standards (WQS) for a given designated use and may identify a pollutant or pollutants (e.g. bacteria, heavy metals, nutrients, etc) as indicators of that impairment. The DEP is required by the EPA to establish a Total Maximum Daily Load (TMDL) for each impaired water to reflect the pollutant load that the water body can assimilate without exceeding the WQS. Industrial activities that discharge to impaired waters are required to meet certain criteria identified in this section.

(1) Existing Discharge to an Impaired Water without an Established TMDL

If the permittee discharges to an impaired water without an established TMDL, they are required to comply with Section 5(c)(5) and the annual monitoring requirement of Section 5(e)(1)(D). Note that this provision also applies to situations where the DEP determines that the discharge is not controlled as necessary to meet water quality standards in a downstream water segment, even if the discharge is to a receiving water that is not specifically identified as an impaired water on a Section 303(d) list.

(2) Existing Discharge to an Impaired Water with an Established TMDL

If the permittee discharges to an impaired water with an established TMDL, the DEP will inform them if any additional controls are necessary for the discharge to be consistent with the available Waste Load Allocation in the TMDL, or if coverage under an individual permit is necessary in accordance with "Issuance of an Individual Permit" (Section 3(i)). The permittee must also conduct the appropriate monitoring in accordance with "Monitoring of Discharges to Impaired Waters" (Section 5(e)(1)(D)).

(3) New Discharge to an Impaired Water

If a new discharge to an impaired water is authorized pursuant to the conditions of Section 3(b)(9), the permittee must implement and maintain any control measures or conditions on the site that enabled such authorization, and modify such measures or conditions as necessary to maintain such authorization. The permittee must also maintain compliance with this subsection and Section 5(e)(1)(D).

(h) Reporting & Record Keeping Requirements

(1) Recording of Results

For each measurement or sample taken pursuant to the requirements of this general permit, the discharger shall maintain records of the following information:

(A) the place, date, and time of sampling and the time the discharge started;

- (B) the person(s) collecting samples;
- (C) the dates and times the analyses were initiated;
- (D) the person(s) or laboratory that performed the analyses;
- (E) the analytical techniques or methods used; and
- (F) the results of all analyses.

(2) Records Retention

All records and information resulting from the monitoring activities required by this general permit including all records of analyses performed and calibration and maintenance of instrumentation shall be retained for a minimum of five (5) years following the date of expiration of this general permit, or longer if requested by the commissioner.

(3) Reporting Requirements

(A) All results of monitoring conducted pursuant to this general permit shall be submitted on the Stormwater Monitoring Report (SMR) form provided in Appendix B, including all supporting chemical/physical measurements performed in association with the toxicity tests as well as dose-response data. A separate SMR form shall be used for each discharge monitored. All SMR forms shall be submitted within ninety (90) days of the date of sampling to:

WATER TOXICS PROGRAM COORDINATOR BUREAU OF WATER PROTECTION AND LAND REUSE DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

In the case of stormwater discharges through a municipal separate storm sewer system, these results shall also be made available to the operator of that system upon request.

(B) Additional Monitoring by Permittee

If the permittee monitors any pollutant at the discharge location(s) designated herein more frequently than required by this general permit or monitors for additional parameters not included in the "Monitoring" section (Section 5(e)) or "Additional Requirements for Certain Sectors" (Section 5(f)) of this general permit, using approved analytical methods as specified above, the results of such monitoring shall meet the reporting requirements of Section 5(h)(3)(A).

(i) Regulations of Connecticut State Agencies Incorporated into this General Permit

The permittee shall comply with the following Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein:

(1) Section 22a-430-3:

Subsection (b) General - subparagraph (1)(D) and subdivisions (2),(3),(4) and (5)

Subsection (c) Inspection and Entry

Subsection (d) Effect of a Permit - subdivisions (1) and (4)

Subsection (e) Duty to Comply

Subsection (f) Proper Operation and Maintenance

Subsection (g) Sludge Disposal

Subsection (h) Duty to Mitigate

Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)

Subsection (j) Monitoring, Records and Report Requirements - subdivisions (1), (6), (7),

(8), (9) and (11) (except subparagraphs (9) (A) (2) and (9) (c)

Subsection (k) Bypass

Subsection (m) Effluent Limitation Violations

Subsection (n) Enforcement

Subsection (p) Spill Prevention and Control

Subsection (q) Instrumentation, Alarms, Flow Recorders

Subsection (r) Equalization

(2) Section 22a-430-4

Subsection (t) Prohibitions

Subsection (p) Revocation, Denial, Modification

Appendices

Section 6. General Conditions

(a) Reliance on Registration

When evaluating a registration, the commissioner relies on information provided by the registrant. If such information proves to be false or incomplete, the authorization issued under this general permit may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

(b) Duty to Correct and Report Violations

Upon learning of a violation of a condition of this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results, prevent further such violation, and report in writing such violation and such corrective action to the commissioner within five (5) days of the permittee's learning of such violation. Such report shall be certified in accordance with Section 6(d) of this general permit.

(c) Duty to Provide Information

If the commissioner requests any information pertinent to the authorized activity or to determine compliance with this general permit, the permittee shall provide such information in writing within thirty (30) days of such request. Such information shall be certified in accordance with Section 6(d) of this general permit.

(d) Certification of Documents

Any document, including but not limited to any notice, which is submitted to the commissioner under this general permit shall be signed by, as applicable, the registrant or the permittee in

accordance with section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

(e) Date of Filing

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word "day" as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

(f) False Statements

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

(g) Correction of Inaccuracies

Within fifteen (15) days after the date a permittee becomes aware of a change in any of the information submitted pursuant to this general permit, becomes aware that any such information is inaccurate or misleading, or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be certified in accordance with Section 6(d) of this general permit. The provisions of this subsection shall apply both while a request for registration is pending and after the commissioner has approved such request.

(h) Transfer of Authorization

An authorization under this general permit is not transferable.

(i) Other Applicable Law

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

(j) Other Rights

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the

air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

Section 7. Commissioner's Powers

(a) Abatement of Violations

The commissioner may take any action provided by law to abate a violation of this general permit, including the commencement of proceedings to collect penalties for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

(b) General Permit Revocation, Suspension, or Modification

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify it to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

(c) Filing of an Individual Application

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit to continue lawfully conducting the activity authorized by this general permit, the permittee may continue conducting such activity only if the permittee files an application for an individual permit within sixty (60) days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall comply with the terms and conditions of this general permit. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued: August 23, 2010	
	Amey W. Marrella
	Commissioner

Appendix A: Industrial Stormwater General Permit SIC Code Definitions Definition 2

SIC	Except	Classification				
24		Lumber & Wood Products, Except Furniture				
	2434	Wood Kitchen Cabinets				
26		Paper & Allied Products				
	265	Paperboard Containers & Boxes				
	267	Converted Paper & Paperboard Products, Except Containers & Boxes				
28		Chemicals & Allied Products				
	283	Drugs				
	285	Paints, Varnishes, Lacquers, Enamels, & Allied Products				
29		Petroleum Refining & Related Industries				
311		Leather Tanning & Finishing				
32		Stone, Clay, Glass & Concrete Products				
	323	Glass Products, Made of Purchased Glass				
33		Primary Metal Products				
3441		Fabricated Structural Metal				
373		Ship & Boat Building & Repairing				

Definition 5

SIC	Except	Classification
4953		Refuse Systems (Includes Dumps, Landfills, Rubbish Collection & Disposal)

Definition 6

SIC	Except	Classification
5015		Motor Vehicle Parts, Used
5093		Scrap & Waste Materials

Definition 7

SIC	Except	Classification
4911		Electric Services (electric power generation, transmission or distribution)

Definition 8

SIC	Except	Classification			
40		Railroad Transportation			
41		Local & Suburban Transit & Interurban Highway Passenger			
42		Motor Freight Transportation & Warehousing			
	4221	Farm Product Warehousing & Storage			
	4222	Refrigerated Warehousing & Storage			
	4225	General Warehousing & Storage			
44		Water Transportation			
45		Transportation by Air			
5541		Retail Truck Stops			
5551		Boat Dealers			
7997		Yacht Clubs			
9199		Public Works Garages			

Definition 10

SIC	Except	Classification			
20		Food & Kindred Products			
21		Tobacco Products			
22		Textile Mill Products			
23		Apparel & Other Products Made from Fabrics & Similar Materials			
2434		Wood Kitchen Cabinets			
25		Furniture & Fixtures			
265		Paperboard Containers & Boxes			
267		Converted Paper & Paperboard Products, Except Containers & Boxes			
27		Printing, Publishing & Allied Industries			
283		Drugs			
285		Paints, Varnishes, Lacquers, Enamels, & Allied Products			
30		Rubber & Misc. Plastics Products			
31		Leather & Leather Products			
	311	Leather Tanning & Finishing			
323		Glass Products, Made of Purchased Glass			
34		Fabricated Metal Products, Except Machinery & Transportation Equipment			
	3441	Fabricated Structural Metal			
35		Industrial & Commercial Machinery & Equipment			
36		Electronic & Other Electrical Equipment & Components Except Computer Equipment			
37		Transportation Equipment			
	373	Ship & Boat Building & Repairing			
38		Measuring, Analyzing & Controlling Instruments; Photographic,			
		Medical & Optical Goods; Watches & Clocks			
39		Misc. Manufacturing Industries			
4221		Farm Product Warehousing & Storage			
4222		Refrigerated Warehousing & Storage			
4225		General Warehousing & Storage			

Definition 11

SIC	Except	Classification
5171		Petroleum Bulk Stations & Terminals

APPENDIX B – INDUSTRIAL STORMWATER MONITORING GUIDANCE

SUMMARY OF GENERAL AND SECTOR SPECIFIC MONITORING REQUIREMENTS

Type	Quarterly	Semi-Annual	Benchmarks	Effluent Limits	Annual
General	Visual	Rainfall pH, sample pH, O&G, COD, TSS, P, TKN, NO3, Cu, Pb, Zn	Sample pH, O&G, COD, TSS, P, TKN, NO3, Cu, Pb, Zn	None	Aquatic Toxicity (Years 1 &2) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)
SECTOR A ASPHALT PLANTS	Visual	Same as general AND Semivolatiles	Same as general	Asphalt emulsion facilities ONLY: O&G, Sample pH, TSS	Aquatic Toxicity (Years 1 &2) AND Sample pH, O&G, TSS (Asphalt emulsion only) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)
SECTOR B MINES&QUARRIES	Visual	Same as general	Same as general	None	Aquatic Toxicity (Years 1 &2) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)
SECTOR C REFUSE SYSTEMS	Visual AND Fe (for landfills and solid waste disposal areas)	Same as general	Same as general AND Fe (for landfills and solid waste disposal areas)	Landfills and solid waste disposal areas ONLY: BOD, TSS, Ammonia, Sample pH, Zinc, Alpha Terpineol, Benzoic Acid, p-Cresol, Phenol	Aquatic Toxicity (Years 1 &2), AND (for landfills and solid waste disposal areas only) BOD, TSS, Ammonia, Sample pH, Zinc, Alpha Terpineol, Benzoic Acid, p-Cresol, Phenol AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)
SECTOR D AUTO SALVAGE	Visual AND Fe, Hg, Al	Same as general AND Semivolatiles	Same as general AND Fe, Hg, Al	None	Aquatic Toxicity (Years 1 &2) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)

Туре	Quarterly	Semi-Annual	Benchmarks	Effluent Limits	Annual
SECTOR E SCRAP RECYCLING	Visual AND Fe, Hg, Al	Same as general AND Semivolatiles, PCB	Same as general AND Fe, Hg, Al	None	Aquatic Toxicity (Years 1 &2) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)
SECTOR F STEAM ELECTRIC GENERATION	Visual AND Fe	Same as general	Same as general AND Fe	Coal pile runoff ONLY: pH, TSS	Aquatic Toxicity (Years 1 &2), and pH and TSS (for sites with coal pile runoff) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)
SECTOR G TRANSPORTATION AND PUBLIC WORKS	Visual	Same as general	Same as general	None	Aquatic Toxicity (Years 1 &2) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) if dictated by DEP
Aircraft Deicing Sites Large Airports	Visual	Same as general AND Urea, Glycols, BOD (during deicing season, if used)	Same as general	None	Same as above
Small Airports	Visual	None	Same as general but on an annual basis	None	Same as above AND Same as General Monitoring Requirements in Section 5(e)(1)(A)(ii) (during deicing season) AND Urea, Glycols, BOD (during deicing season, if used)
Maintenance/ Repair/ Salt Storage	Visual	Same as general AND Cl, Cn (for first two years only)	Same as general	None	Same as above
Salt Storage only	None	None	None	None	Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)

Туре	Quarterly	Semi-Annual	Benchmarks	Effluent Limits	Annual
SECTOR G (cont) DOT Maintenance & Repair Facilities	Visual	Same as general but only once in permit term	None	None	Same as above
SECTOR H MARINAS, YACHT CLUBS AND BOAT DEALERS	Visual	Same as general AND Fe, Al	Same as general (but no Cu Benchmark) AND Fe, Al	None	Aquatic Toxicity (Years 1 &2) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)
SECTOR I SHIP AND BOAT BUILDING AND REPAIR	Visual	Same as general	Same as general (but no Cu Benchmark)	None	Aquatic Toxicity (Years 1 &2) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)
SECTOR J SMALL-SCALE COMPOSTING FACILITIES	Visual (if site discharges)	None	COD, TSS, P, NO3, TKN (if site discharges)	None	Aquatic Toxicity (Years 1 &2) AND COD, TSS, P, NO3, TKN (if site discharges) AND Impaired Water parameters (if applicable) AND TMDL Parameter(s) (if dictated by DEP)

APPENDIX C – AQUIFER PROTECTION AREAS AND OTHER GROUNDWATER DRINKING SUPPLY AREAS GUIDANCE

In considering the use of stormwater infiltration, the Plan should consider measures to reduce or mitigate potential impacts to both ground water (aquifers) and surface waters, taking into consideration both quantity and quality of the runoff. The emphasis should be to minimize, to the extent possible, changes between predevelopment and post-development runoff rates and volumes.

The basic stormwater principals for Aquifer Protection Areas (and other groundwater drinking supply areas) are to prevent inadvertent pollution discharges/releases to the ground, while encouraging recharge of stormwater where it does not endanger groundwater quality. Measures include:

- prevent illicit discharges to storm water, including fuel/chemical pollution releases to the ground.
- minimize impervious coverage and disconnect large impervious areas with natural or landscape areas
- direct paved surface runoff to aboveground type land treatment structures sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground.
- provide necessary impervious pavement in high potential pollutant release areas. These "stormwater hot spots" include certain lands use types or storage and loading areas, fueling areas, intensive parking areas and roadways (see table below).
- only use subsurface recharge structures such as dry wells, galleries, or leaching trenches, to directly infiltrate clean runoff such as rooftops, or other clean surfaces. These structures do not adequately allow for attenuation of salts, solvents, fuels or other soluble compounds in groundwater that may be contained in runoff.
- restrict pavement deicing chemicals, or use an environmentally suitable substitute such as sand only, or alternative de-icing agents such as calcium chloride or calcium magnesium.

Infiltration of stormwater should be **restricted** under the following site conditions:

- Land Uses or Activities with Potential for Higher Pollutant Loads: Infiltration of stormwater from these land uses or activities (refer to Table 7-5 below), also referred to as stormwater "hotspots," can contaminate public and private groundwater supplies. Infiltration of stormwater from these land uses or activities may be allowed by the review authority with appropriate pretreatment. Pretreatment could consist of one or a combination of the primary or secondary treatment practices described in the Stormwater Quality Manual provided that the treatment practice is designed to remove the stormwater contaminants of concern.
- *Subsurface Contamination:* Infiltration of stormwater in areas with soil or groundwater contamination such as brownfield sites and urban redevelopment areas can mobilize contaminants.
- *Groundwater Supply and Wellhead Areas:* Infiltration of stormwater can potentially contaminate groundwater drinking water supplies in immediate public drinking water wellhead areas.

Land Uses or Activities with Potential for Higher Pollutant Loads

Table 7-5 of the 2004 Stormwater Quality Manual

Land Use/Activities

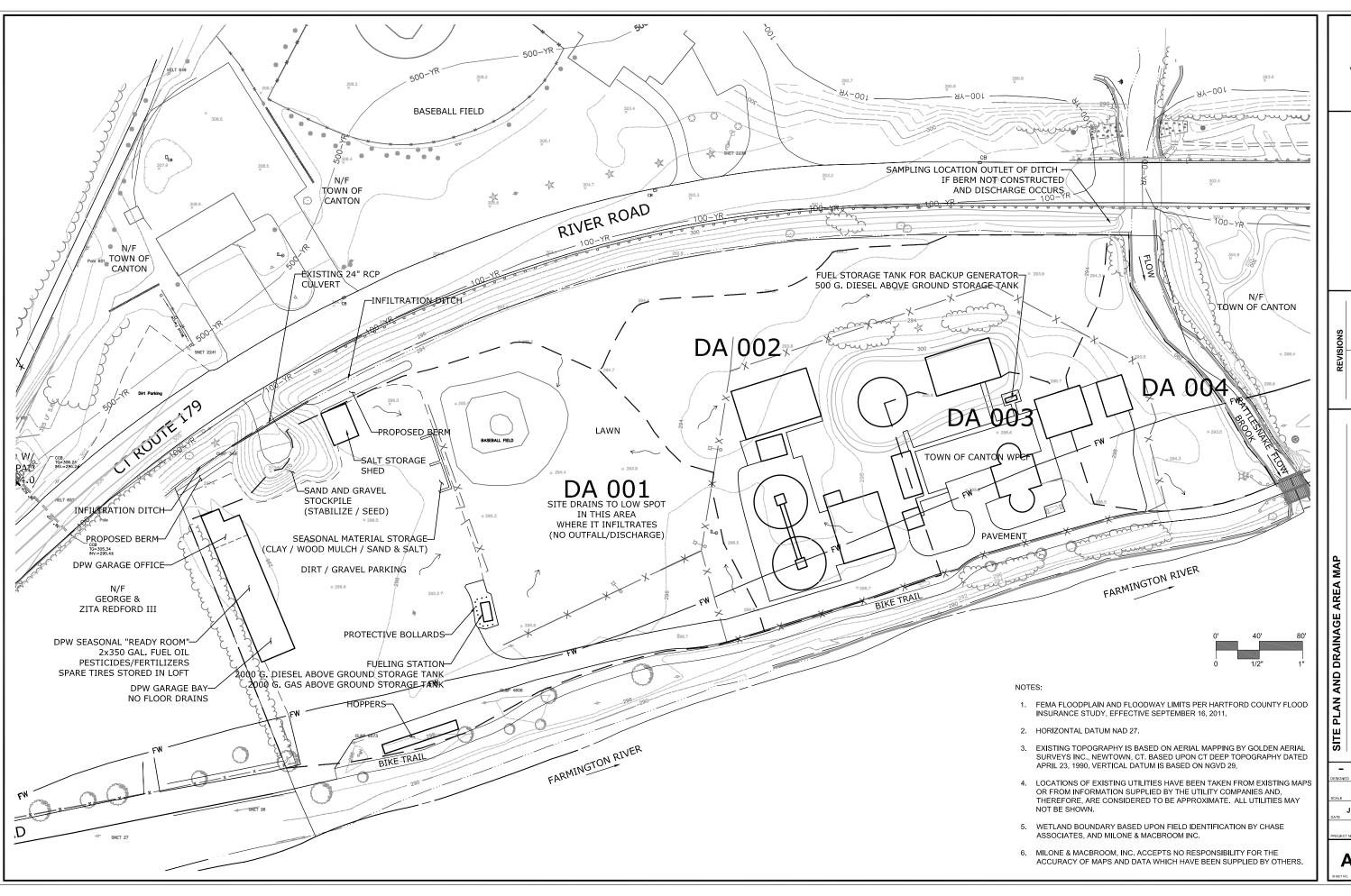
- Industrial facilities subject to the DEP Industrial Stormwater General Permit
- Vehicle salvage yards and recycling facilities
- Vehicle fueling facilities (gas stations and other facilities with on-site vehicle fueling)
- Vehicle service, maintenance, and equipment cleaning facilities
- Fleet storage areas (cars, buses, trucks, public works)
- Commercial parking lots with high intensity use (shopping malls, fast food restaurants, convenience stores, supermarkets, etc.)
- Public works storage areas

- Road salt storage facilities (if exposed to rainfall)
- Commercial nurseries
- Flat metal rooftops of industrial facilities
- Facilities with outdoor storage and loading/unloading of hazardous substances or materials, regardless of the primary land use of the facility or development
- Facilities subject to chemical inventory reporting under Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA), if materials or containers are exposed to rainfall
- Marinas and shipbuilding facilities (service and maintenance)
- Other land uses and activities as designated by the review authority

For further information regarding the design of stormwater collection systems in Aquifer Protection Areas, contact the Aquifer Protection Area Program at (860) 424-3020.

APPENDIX B Site Map and Drainage Area Map

Public Works Garage and WPCF Canton, Connecticut





MILONE & MACBROOM®

DPW GARAGE AND WPCF STORMWATER POLLUTION

ВАМ NEB 1"=80' JUNE 25, 2014 1752-24-1

App. B

APPENDIX C Spill and Leak Reporting Form and Summary of Chemicals Stored On Site Public Works Garage and WPCF Canton, Connecticut

APPENDIX C: TOWN OF CANTON PUBLIC WORKS GARAGE AND WPCF SUMMARY OF CHEMICALS STORED ON SITE

Material	Manner of Storage	Location (Drainage Area)	Quantity Stored (Estimated)	Exposed in Last 3 Years		Likelihood of Contact with Stormwater	Known Past Significant Spills/Leaks	
				Yes	No		Yes	No
Unleaded Gasoline	AST	DA-001	2,000 gallons		~	Possible from overfilling of tank or truck		>
Diesel (DPW)	AST	DA-001	2,000 gallons		~	Possible from overfilling of tank or truck		>
Diesel (WPCF)	AST	DA-003	500 gallons		~	Possible from overfilling of tank or truck		>
Miscellaneous Lubricants	Drum	DA-001	250 gallons		~	None; stored in Municipal Garage		>
Pesticide – Glyphosate	Cabinet	DA-001	10 gallons		•	None; stored in Municipal Garage		>
Sand/Salt	Stockpile	DA-001			•	Possible during loading/unloading operations		*

Note: AST = Aboveground storage tank, UST = Underground storage tank

Spill Control and Response Plan

- All areas where a spill could potentially discharge to stormwater and in which liquid chemicals are stored are provided with impermeable containment which will hold at least the volume of the largest chemical container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. Water collected in the containment area will not be discharged without testing or observation for possible pollutants.
- Where possible, all chemicals in containers of 100 gallon capacity or less are stored under a roof which minimizes stormwater entry to the containment area.
- All dumpsters have covers and intact drain plugs.
- The PPT leader or the spill coordinator will be advised immediately of all spills of hazardous or Connecticut regulated materials, regardless of quantity.
- The spill will be evaluated to determine the necessary response. If there is a health hazard or fire or explosion potential, 911 will be called. If the spill is large or threatens surface water systems (including stormwater structures) the DEEP Oil and Chemical Spills Unit will be called at 424-3338. Any questions on pollution potential will be directed to the DEEP Waste Management Bureau at 424-3372.
- The spill will be contained as close to the source as possible with a dike of absorbent materials
 from the spill cleanup equipment (such as socks, pads, pillows or "pigs"). Additional dikes will be
 constructed to protect swales or other stormwater conveyances or streams. A cover or dike will
 protect any other stormwater structures such as catch basins.
- All waste material will be disposed of properly, including used absorbent materials. The DEEP will be called for any questions about proper disposal of hazardous or regulated wastes.

	Types of materials present on-site which could potentially spill and discharge to stormwater include:					
1.	Gasoline and diesel fuel					
2.	UST filling sites and above ground tank filling sites					
3.						
4.						
5.						
6.						

Spill Control and Response Plan (cont.)

Arc	eas where spills may potentially occur and discharge to stormwater include:
1.	Fueling area
2.	
3.	
4.	
5.	
6.	
Me	easures used to minimize the possibility of spills include:
1.	Absorbent blankets and speedi-dry stored on site
2.	
3.	
4.	
5.	

Spill Control And Response Plan (cont.)

• A history of spills and/or leaks for the last three years is shown below. (Make additional copies of table if needed.)

	(check one) Location (as indicated on		Description						
Date (MM/DD/YY)	Spill	Leak	site map, if possible)	Type of Material	Quantity	Source, if known	Reason	Response Procedures	Measures To Prevent Reoccurrence

APPENDIX D Required Plan Certifications

Public Works Garage and WPCF Canton, Connecticut

Certification of the **Stormwater Pollution Prevention Plan**

The following certification shall be signed by a professional engineer licensed to practice in Connecticut or a Certified Hazardous Materials Manager.

"I certify that I have thoroughly and completely reviewed the Stormwater Pollution Prevention Plan prepared for this site. I further certify, based on such review and site visit by myself or my agent, and on my professional judgment, that the Stormwater Pollution Prevention Plan meets the criteria set forth in the General Permit for the Discharge of Stormwater Associated with Industrial Activity effective on October 1, 2011. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

Nicolla Burnham

Senior Project Manager
Title

2092 8 P.E. Number (if applicable)

Certification of the Nonstormwater Discharges

The following certification shall be signed by a professional engineer licensed to practice in Connecticut or a Certified Hazardous Materials Manager.

"I certify that in my professional judgment, the stormwater discharge from the site consists only of stormwater*, or of stormwater combined with wastewater authorized by an effective permit issued under section 22a-430 or section 22a-430b of the Connecticut General Statutes, including the provisions of this general permit, or of stormwater combined with any of the following discharges provided they do not contribute to a violation of water quality standards:

- landscape irrigation or lawn watering;
- uncontaminated groundwater discharges such as pumped groundwater, foundation drains, water from crawl space pumps and footing drains;
- discharges of uncontaminated air conditioner or refrigeration condensate;
- water sprayed for dust control or at a truck load wet-down station;
- naturally occurring discharges such as rising groundwaters, uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20)), springs, and flows from riparian habitats and wetlands.

This certification is based on testing and/or evaluation of the stormwater discharge from the site. I further certify that all potential sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test have been described in detail in the Stormwater Pollution Prevention Plan prepared for the site. I further certify that no interior building floor drains exist unless such floor drain connection has been approved and permitted by the commissioner or otherwise authorized by a local authority for discharge as domestic sewage to sanitary sewer. I am aware that there may be significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

Signature

Data

Title Senior Project Manager

20928

P.E. Number (if applicable)

*Following implementation of the recommendations in Section 5.0 of the SWPPP



APPENDIX E Inspection and Monitoring Reporting Forms

Public Works Garage and WPCF Canton, Connecticut

Maintenance And Inspection

A member of the Pollution Prevention Team conducts monthly inspections of all areas covered by the Plan and all stormwater structures and outfalls on the site for surface or floating debris and sediment. The site is inspected weekly for trash and surface debris. Structures and outfalls are cleaned of sediment at least once a year during the month of April and at other times as necessary to prevent the discharge of pollutants from structures or outfalls.

Areas and structures covered by the monthly inspection include:

Areas Checked	Checked for
Parking areas	Spillage and trash
Salt Storage	Spillage and coverage
Fuel Storage Tank	Spillage and careful filling practices
Fuel Station	Spill prevention materials and practices, hoses & fittings maintained
Materials Storage Area	Spill prevention materials, housekeeping, leaks, spills
Site Erosion	Evidence of soil erosion

Drainage Structures	Checked for
Paved areas (with or without curbs)	Perimeter erosion, trash, spillage, pavement condition

Weekly Inspection Checklist for the Year (list year)

The site is inspected weekly for trash and debris. The table on this page is initialed each week by a member of the Pollution Prevention Team. *If any problems are observed, write "No" in the "OK?" column and note the problem and measures taken in the in the space following the table. Make a new copy of this table for each new year.*

Date (MM/DD/YY)	Initials	OK?*	Date (MM/DD/YY)	Initials	OK?*	Date (MM/DD/YY)	Initials	OK?*

*Comments or problems and measures taker	n:

Monthly Inspection Checklist for the Year (list year)

The table on this page is filled out and initialed each month by a member of the Pollution Prevention Team. If any problems are observed, write "No" in the "OK?" column and note the problem and measures taken in the appropriate space. Make a new copy of this table each year.

Date (list day)	Initials	OK?	Problems noted and measures taken
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Drainage structu	res and outfa	ılls were c	eleaned on April
by			(company)

SEMIANNUAL COMPLIANCE INSPECTION FORM TOWN OF CANTON PUBLIC WORKS GARAGE AND WPCF

ite (of inspection:	Weath	er conditions:	
	Paved areas in need of sweeping?	Yes	No	
	Action taken:			
	Sand / salt storage inspected? Are piles covered?	Yes Yes	No	
	Action taken:			
3.	Gas and diesel tanks inspected? Any leakage or spillage evident?	Yes Yes		
	Action taken:			
l.	Spill response equipment inspected? Maintenance needed?	Yes Yes	No	
	Action taken:			
	Erosion control measures around stockpil Evidence of failure? Maintenance needed?	les inspected?	Yes	No No No
	Action taken:			
ó .	Facility perimeter banks inspected? Evidence of erosion? Maintenance needed?	Yes Yes Yes		
	Action taken:			

Quarterly Visual Monitoring Form

Fill out a separate form for each sample collected (one form per outfall).

Facility	Town of Ca	nton Public Works Garage	and WPCF			
Sample Location:		Examiner's Name:				
Quarter / Year:		Date / Time Collected:				
Rainfall Amount:		Runoff Source:	Rainfall Snowmelt			
Parameter	Parameter Description	Parameter	Characteristics			
1. Color	Does the stormwater appear to have any color? Yes No (Clear)	If Yes, describe: Yellow Other:	Brown Red Gray			
2. Clarity	Is the stormwater clear? Yes No	If not clear, which of the following best describes the clarity of the stormwater? Suspended Solids Milky/Cloudy Opaque Other:				
3. Oil Sheen	Can you see a rainbow effect or sheen on the water surface? Yes No	Which best describes the Rainbow sheet Floati	sheen? ing oil globules			
4. Odor	Does the sample have an odor? Yes No	If Yes, describe: Chemica Sewage Sour Milk Oil/ Other:				
5. Floating Solids	Is there anything on the surface of the sample? Yes No	If Yes, describe: Suds C Water Fowl Excrement Other:	Pily Film Garbage Sewage			
6. Suspended Solids	Is there anything suspended in the sample? Yes No	Describe:				
	*** wait 30	minutes ***				
7. Settled Solids	Is there something settled on the bottom of the sample? Yes No	Describe (wait 30 minutes size, and material)	s after collection, note type,			
8. Foam	Is there foam or material forming on the top of the sample surface? Yes No	Describe: (shake bottle ge	ently, is there foam?)			

Detail any concerns, corrective actions taken, and any other indicators of pollution present in the sample. This should include the identified source if there are visible indicators present in the sample:

Stormwater Examiner's Signature and Date:

Note – Sample should be collected and analyzed in a colorless glass or plastic bottle.

Instructions for Completing the Quarterly Visual Monitoring Form

The CT DEEP requires visual monitoring of stormwater as an indicator of the effectiveness of the control measures utilized in the facility's stormwater pollution prevention plan. Once each quarter for the entire permit term, permittees must collect a stormwater sample from each outfall and conduct a visual assessment of each of these samples. These samples should be collected in such a manner that they are representative of the stormwater discharge. If there are no direct means of conveyance (i.e., pipe) for a collection sample, a sample representative of the site conditions must be collected at the discharge point closest to the waters of the state. Each assessment must be kept on site and available for inspection and review by the CT DEEP at any time. All inspections must be performed during daylight hours and collected within 30 minutes of a storm event.

Fill out all information on the top of the visual monitoring form. To provide the best estimate of rainfall, use a rain gage or a website that provides this information (i.e., http://www.weatherunderground.com). Take a grab sample in a clear container. Evaluate the sample in a well-lit area for the following parameters:

- **A. Color:** Record the best description of the sample color in the appropriate space on the form. Color may indicate inappropriate discharge.
- **B. Clarity**: This parameter refers to the degree of cloudiness present in the sample. It is *usually* an indication of fewer pollutants in the water if the sample is clear or transparent. If the clarity has changed since the last sample, identify what might have caused this to happen.
 - 1 **Clear** Sample does not filter out any light; can be seen through regardless of color.
 - 2 **Cloudy** Sample filters out some light; not clear but objects can still be identified when looking through the sample.
 - 3 **Very Cloudy** Sample filters out most light; objects are indiscernible when looking through the sample.
 - 4 **Opaque** Sample does not allow any light to pass through; objects cannot be seen when looking through the sample.
- **C. Oil Sheen:** Record whether or not an oil sheen is present. If a film of iridescent color is noted on the surface of the sample or a rainbow effect appears to be floating on the surface of the water, this usually indicates oil is present.
- **D. Odor:** If sample has no odor other than natural rainwater or snowmelt, write "NO" on the visual monitoring form. Note the presence of any of the following odors if detected: gasoline, diesel, oil, solvents (WD-40, other petroleum products, etc.), garbage, fishy, sweet/sugary, any other unusual odors not normally present in clean runoff from the area sampled.
- **E. Floating Solids:** A contaminated flow may contain floatable solids or liquids. Identifying floatables can aid in finding the source of the contamination. Examples of floatables are spoiled food products, oils, plant parts, solvents, sawdust, foams, and fuel. Give a general description of the type of floating solids present (wood chips, leaf debris, algae, etc.) in the general comments section for each sample. Identify amount of floating solids as described below.
 - 1 **High** More than 20% of the surface of the sample is covered with floating solids.
 - 2 **Moderate** Less than 20% of the surface of the sample is covered with floating solids.
 - 3 **Slight** Only a few floating particles were observed on the surface of the sample.
 - 4 **None** No floating solids were present on the surface of the sample.

F.	Suspended solids: Record whether or not settled solids were present in the sample. Suspended
	solids will be suspended within the column of water and may contribute to changes in water color
	or clarity. Cracked or deteriorated concrete or peeling surface paint at an outfall usually indicates
	the presence of severely contaminated discharges. Contaminants causing this type of damage are
	usually very acidic or basic.

------WAIT 30 MINUTES ------

- **G. Settled Solids:** After 30 minutes has passed, give a general description of the type of settled solids present (sand, decayed plant matter, rust particles, etc.) in the general comments section for each sample.
- **H. Foam:** After completing #7, shake the bottle *gently*. Record foam results on the form as they most closely match one of the descriptions listed below.
 - 1 **None** Most bubbles break down within 10 seconds of shaking; only a few large bubbles persist longer than 10 seconds.
 - 2 **Moderate** Many small bubbles are present, but these bubbles persist for less than 2 minutes after shaking.
 - 3 **High** Many small bubbles are present, and they persist longer than 2 minutes after shaking.

Detail any concerns, corrective actions taken, and any other indicators of pollution present in the sample. This should include the identified source if there are visible indicators present in the sample. The person performing the test must sign and date each form.

1752-24-1-jn2414-rpt