

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

**39 PERRY AVENUE**

**ATTLEBORO, MASSACHUSETTS 02703**

**Engineered Materials Solutions, LLC**

**August 31, 2015**

**Prepared by**

**Mike Karavolis**

**Safety and Health Director**

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**STORM WATER POLLUTION PREVENTION PLAN  
FACILITY CERTIFICATION**

**GENERAL INFORMATION**

1. Name of facility: EMS Engineered Materials Solutions, LLC
2. Type of facility: Manufacturing of metal clad products and assorted formed-metal products
3. Location of facility: 39 Perry Avenue  
Attleboro, MA 02703
4. Name and address of operator:  
Name: EMS Engineered Materials Solutions, LLC  
Address: 39 Perry Avenue, Attleboro, MA 02703

**CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Paul Duffy  
Printed name of Responsible Corporate Officer

Paul Duffy  
Signature of Responsible Corporate Officer

9/1/15  
Date

## **1 INTRODUCTION**

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### **1.1 Purpose of the SWPPP**

This Storm Water Pollution Prevention Plan (SWPPP) is designed to explain what personnel at EMS Engineered Materials Solutions, LLC (EMS) will do to reduce or control pollution of storm water runoff at its Attleboro, Massachusetts facility.

Federal regulations require that all facilities which have point source discharges of storm water associated with industrial activity obtain a National Pollutant Discharge Elimination (NPDES) permit. All facilities seeking coverage under the Multi-Sector General Permit (MSGP) for storm water associated with industrial activity are required to prepare and implement an SWPPP.

### **1.2 Overview of Regulatory Authority**

This SWPPP has been prepared to meet federal requirements and explains how EMS will reduce and minimize the potential for pollution to enter surface waters. Since the Commonwealth of Massachusetts does not have delegated NPDES permitting authority, the storm water permitting program is administered by the Environmental Protection Agency's (EPA's) Region 1 office in Boston, MA. The MA Department of Environmental Protection (DEP) has also established state-specific conditions (listed in Section 1.2.2) however, these conditions currently do not apply to the EMS site.

#### **1.2.1 Federal Regulations**

The Federal Clean Water Act (CWA) authorizes the EPA to regulate discharges to surface waters of the United States (U.S.). As a result, the EPA promulgated the NPDES regulations, 40 CFR Part 122. These regulations cover, among other things, discharges of storm water from industrial facilities to surface waters. EMS meets the regulatory definition of facilities with industrial activity under the EPA storm water discharge regulations.

On August 31, 2015, EMS filed a Notice of Intent (NOI) with the EPA requesting coverage under the 2015 MSGP. The permit and authorization to discharge under the 2015 MSGP will expire at midnight on June 4, 2020.

### **1.2.2 State Regulations**

The Commonwealth of Massachusetts has specific regulations for storm water pollution prevention, but the EPA continues to be the permitting agency for storm water discharges from EMS. However, the state does have "specific conditions" which are added to or supersede the federal regulations. These "conditions" or requirements apply only to state "Areas of Critical Environmental Concern" (ACECs) and "Outstanding Resource Waters" (ORWs). Since EMS is not located within either of these areas, the requirements do not apply.

The DEP in coordination with the Massachusetts Coastal Zone Management (MCZM) has also issued guidance and established a policy for the management of storm water. These performance-based standards, which focus mainly on discharges from new developments and redevelopments, do not apply to EMS.

### **1.3 Eligibility for Permit Coverage**

As indicated in the NOI submitted for coverage under the MSGP, a review conducted by EMS concluded that EMS has met the eligibility requirements under the Historic Preservation Act and the Endangered Species Act. Refer to Appendix G for documentation of these determinations.

## 2 GENERAL INFORMATION

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### **Facility Name and Address:**

Engineered Materials Solutions, LLC  
39 Perry Avenue  
Attleboro, Massachusetts 02703  
Latitude: 41° 56' 50" N  
Longitude: 71° 16' 14" W

### **Safety and Health Director:**

Name: Mike Karavolis, Safety and Health Director (Primary Contact)  
Phone: Office 508-342-2115  
Mobile 508-954-3490  
Home 508-252-6054

Name: Mike Mazzoleni, Operations Support Director  
Phone: Office 508-342-2358  
Mobile 508-446-0653

Name: Fred Hall, R&M/Facilities Manager  
Phone: Office 508-342-2173  
Mobile 508-328-5934  
Home 401-946-7161

### **External Emergency Contacts:**

Attleboro Fire Department – 9-1-1 or 508-222-2323  
Attleboro Police Department – 9-1-1 or 508-222-1212  
Local Emergency Planning Committee (Fire Department) (508) 222-2324  
Massachusetts State Police Emergency Response Commission:  
- 24 Hour Hotline – (617) 566-4500  
- Evenings and Weekends – (617) 292-5500  
MA DEP (Southeast Region)  
- General: (508) 946-2850  
- Spill Reporting - 24 Hour Statewide Number: (617) 556-1133 or (888) 304-1133



**Emergency Response Contractor:**

Clean Harbors Environmental Services, Inc.  
Corporate Headquarters  
42 Longwater Drive  
Norwell, MA 02061-9149  
Tel (781) 792-5000

24-hour emergency response - (800) 645-8265  
Providence RI Service Center – 401-431-1847

**Type of Facility:**     Manufacturing of metal clad products and metallic alloys

**Operating Hours:**   7 days per week, 24 hours per day

**Number of Employees:** 250

**NPDES Multi-Sector General Permit Number:** MAR05CW22 (2008 MSGP)

## **2.1 Background and Site Description**

EMS is located at 39 Perry Avenue in Attleboro, Massachusetts, approximately 1.4 miles east of Route 95 and 0.5 miles east of the Ten Mile River. A site location map is included as Figure 2.

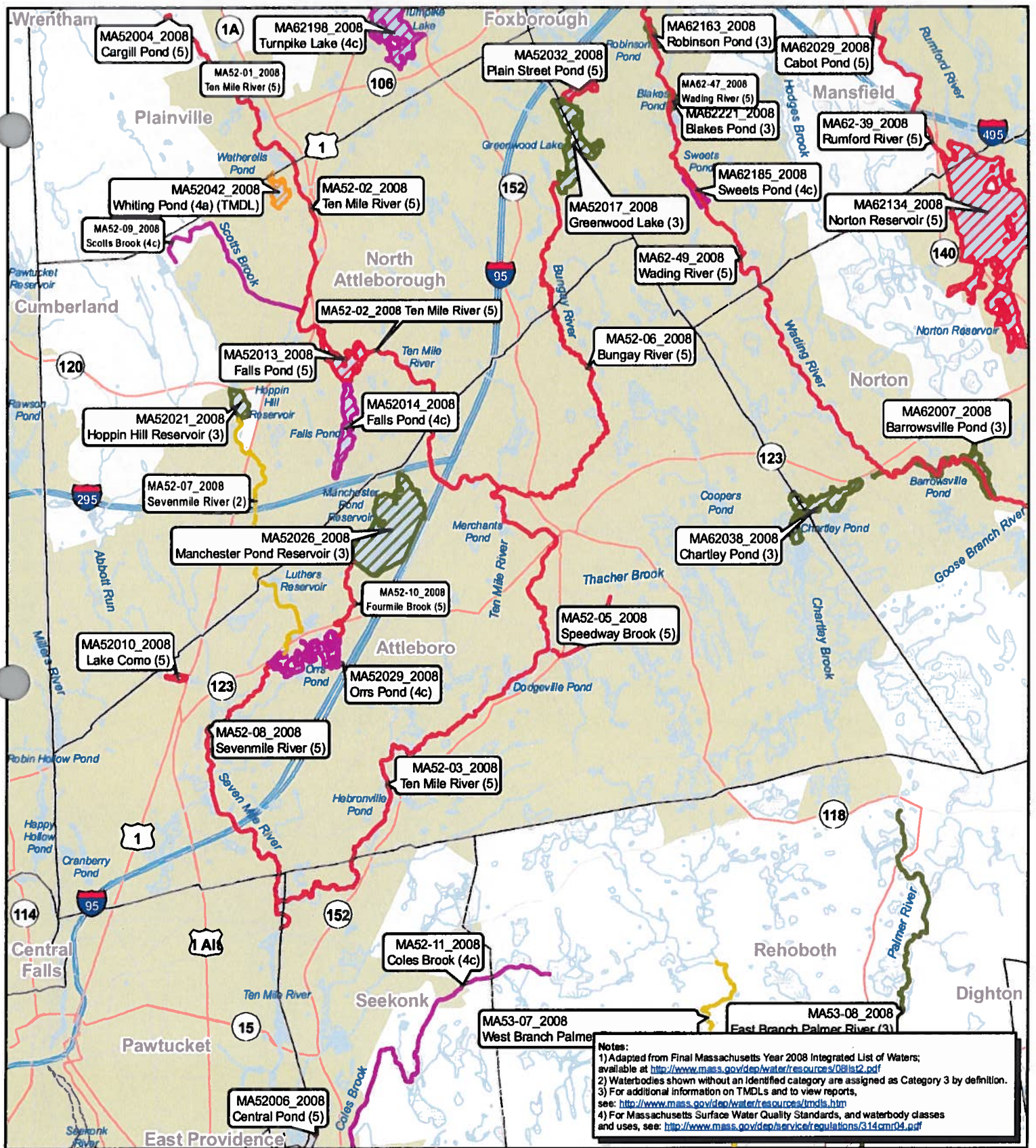
In November 2000, EMS purchased from Texas Instruments (TI) the “Materials” portion of operations. EMS conducts business within Buildings 3 and 4. Building 3 houses equipment used to stamp circular blanks for cookware applications and for the manufacture, assembly and heat treatment of catalytic core substrates, while Building 4 houses equipment associated with the manufacture of industrial metals and thermostatic bi-metals. Equipment types included in both buildings are cleaning lines, rolling mills, heat treating furnaces, slitters, flatteners, and stamping presses.

EMS employs approximately 250 people, with approximately 429,500 square feet of production and office floor space within the two buildings. Major product lines include clad metals (e.g., aluminum, stainless steel, nickel, carbon steel and copper) used for metal cookware, cable wrap, button cell batteries and thermostatic controls.









# Waterbody Assessment and TMDL Status Attleboro, MA



Map produced by EPA Region I GIS Center  
 Map Tracker ID 6676, February 25, 2010  
 Data Sources: TeleAtlas, Census Bureau, USGS, MassDEP

See companion table for a listing of pollutants, non-pollutants, and TMDLs for each waterbody



### **3 SWPP TEAM**

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The SWPP Team is responsible for the implementation, maintenance, and updating of this storm water pollution prevention plan. One of the first tasks of team members is to define and agree upon a clear and reasonable set of goals for the facility's overall storm water management program. Additional responsibilities include initial site assessment, identification of pollutant sources and risks, decision making on appropriate best management practices (BMPs) and measures and controls, directing the actual implementation of the BMPs, and conducting regular evaluations to measure the effectiveness of the SWPPP. The SWPP Team will receive training consistent with the training descriptions outlined in Section 13 of this plan.

Worksheet #1 constitutes the SWPP Team Member Roster, which includes the name, job title and phone number for each team member. Since SWPPP responsibilities may overlap with responsibilities outlined in the Spill Control and Countermeasure (SPCC) Plan/Contingency Plan, a general list of responsibilities applicable to all members is included at the end of the roster. The SWPP Team will follow the SPCC/Contingency Plan that has been developed to control or address various spill and emergency scenarios, and management situations. The Director of Safety and Health will fill out this roster and ensure that all employees are aware of those individuals responsible for storm water management. This roster should be revised any time that personnel or responsibility changes occur.

The SWPP Team will meet on a regular basis but no less than annually. At a minimum, elements of discussion for this meeting will include the following:

- Environmental/Incidents Spills
  - Overall Assessment of Performance and Response
  - Critique
  - Information/Report Presented
  - Drills (at least annually)
- BMP Philosophies and Protocols
  - New

- Modified
- Training
  - Use of spill response and containment equipment
  - Use of spill and emergency response plans and procedures
  - Emergency contractor procedures
  - Mandatory program modifications (in accordance with federal/state/local authorities)
  - Materials handling and storage
- Information about Health and Safety Risks



**Worksheet 1**  
**Pollution Prevention Team Member Roster**

<b>POLLUTION PREVENTION TEAM MEMBER ROSTER</b>	<b>Worksheet #1</b> <b>Completed by:</b> <u>Mike Karavolis</u> <b>Title:</b> <u>Safety and Health Director</u> <b>Date:</b> <u>August 31, 2015</u>
<p><b>Leader:</b> <u>Mike Karavolis</u></p> <p style="text-align: right;"><b>Title:</b> <u>Safety and Health Director</u>  <b>Office Phone:</b> <u>508-342-2115</u>  <b>Home Phone:</b> <u>508-252-6054</u></p> <p><b>Member:</b></p> <p><b>(1) Mike Mazzoleni</b></p> <p style="text-align: right;"><b>Title:</b> <u>Operations Support Manager</u>  <b>Mobile Phone:</b> <u>508-446-0653</u></p> <p><b>(2) Fred Hall</b></p> <p style="text-align: right;"><b>Title:</b> <u>R&amp;M/Facilities Manager</u>  <b>Office Phone:</b> <u>508-342-2173</u>  <b>Home Phone:</b> <u>401-946-7161</u></p> <p><b>(3) Joe Roy</b></p> <p style="text-align: right;"><b>Title:</b> <u>Logistics Manager</u>  <b>Mobile Phone:</b> <u>508-247-7950</u></p> <p><b>(4) Paul Hartley</b></p> <p style="text-align: right;"><b>Title:</b> <u>Manufacturing Manager</u>  <b>Office Phone:</b> <u>508-446-2961</u></p> <p><b>Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Coordination of plan development and updates</li> <li>• Recordkeeping as required by permit</li> <li>• Implementation of plan</li> <li>• Designation and training of team members</li> <li>• Assistance with conducting audits</li> <li>• Assistance with emergency reporting, spill reports and investigations</li> <li>• Initiation of activities and decision making required to minimize pollution potential (i.e., identification of potential pollution sources and measures or controls)</li> <li>• Initiation of activities required to respond to an emergency in the event of a spill</li> <li>• Performance of required inspections and necessary corrective actions</li> <li>• Implementation of best management practices</li> <li>• Maintenance of good housekeeping practices</li> </ul>	

#### 4 SWPPP AND SPCC PLAN/CONTINGENCY PLAN OVERLAP

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As previously noted, EMS has developed a SPCC/Contingency Plan to ensure that appropriate action is taken to prevent or minimize threats to the safety, health and welfare of company employees, the public, or the environment as well as to minimize or prevent damage to its facility and to neighboring facilities. The SPCC portion of the Plan meets all requirements outlined in 40 CFR 112 and establish procedures, methods, and equipment used to reduce the potential for discharge of oil to navigable waters. The Plan has been broadened to cover the storage of acids and caustics, miscellaneous lubricating oils, buffing compounds, water treatment chemicals and flammable materials, thus meeting the DEP Contingency Plan requirements outlined in 310 CMR 30.521. Procedures described in the SPCC/Contingency Plan will further minimize the potential for storm water pollution to enter waters of the United States (U.S.). Overlaps between this SWPPP and the SPCC/Contingency Plan are described below.

The SWPPP and the SPCC/Contingency Plan team members are the same employees, or personnel with the same job functions. The Safety and Health Director has also been assigned the responsibility for assessing spills, reporting to external agencies and obtaining the necessary manpower and equipment to control spills occurring at the facility. Therefore, any specific training offered to personnel in order to comply with the requirements and regulations governing the SPCC/Contingency Plan will also be indirectly included, by virtue of those individual's job functions, in the SWPPP.

The physical security of the facility is important to both plans. Unauthorized access to the EMS owned buildings is minimized by card activated building access and the full-time operation of the facility. In addition, EMS operates an alarm response system that notifies key individuals of system alarms. The chances that an incident, such as a spill or leak, would go undetected are minimized with a continuously staffed facility. In the event that a spill occurs which poses a threat to human health or the environment, predetermined arrangements made with EMS's Emergency Response Contractor, Clean Harbors Environmental Services, Inc. (CHESI), will be utilized to minimize pollution of storm water discharges. CHESI would be able to respond to most major spills within in a 24-hour time period prior to which trained EMS personnel would implement defensive containment strategies. The reporting requirements for significant material releases would be dictated by the respective materials and their corresponding Reportable Quantity (RQ) thresholds. Both plans identify similar reporting requirements.

## **5 DRAINAGE AREA SITE MAP**

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The Drainage Area Site Map (Figure 1) depicts the overall site drainage characteristics and is designed as a tool for identifying areas that have the potential to cause storm water pollution. The plan is located in the sleeve at the end of the SWPPP.

The plan contains the following specific details:

- Direction of storm water flow;
- Receiving surface water bodies (via the storm water conveyance system);
- Locations of all existing structural BMPs;
- Locations of storm water outfalls and approximate outline of the area draining to each outfall;
- Raw metal, finished metal and scrap metal storage areas;
- Location and source of runoff containing pollutants of concern from adjacent properties; and
- Locations where industrial activities are exposed to precipitation including bulk material transfer areas and scrap storage areas.

The Safety and Health Director, in accordance with MSGP requirements, will update this site map when required. Refer to Appendix A for more information on updating the Drainage Area Site Map and the SWPPP.

## 6 SIGNIFICANT MATERIAL INVENTORY

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September 2015

Operations at EMS can be grouped into two categories, the Bimetal Value Stream and the Clad Value Stream. As part of the operations, EMS maintains chemical receiving and storage areas, and aboveground storage tanks (ASTs) containing oil, and liquefied gases.

Chemicals associated with various operations are primarily stored and dispensed within the respective buildings, where there is minimal likelihood of contact with storm water. However, there is a greater potential for liquid chemical, petroleum, or hazardous waste spills to occur at locations where the materials are received or shipped.

The Tier II Emergency and Hazardous Chemical Inventory lists information pertaining to the on site storage of chemicals. The chemicals reported on the Tier II inventory include hydrochloric acid, hydrogen, nitrogen, and sulfuric acid. The Safety and Health Director maintains the Tier II inventory. Safety Data Sheets (SDS's) are available through the on-line database that can be accessed from any computer connected to the EMS network.

### **6.1 Description of How Materials Could Potentially Come In Contact With Storm water**

Certain operations and activities are more likely to result in exposure of significant materials to storm water runoff. These include:

- Transfer of liquid chemicals and petroleum products (i.e. bulk and drummed materials) at the rear of Building 4;
- Storage and transfer of hazardous wastes (liquids) within buildings;
- Transfer of flammable materials to and from the exterior chemical storage lockers;
- The release of oil, hazardous materials or hazardous waste occurring within a building and migrating to the outside environment;
- Process emissions;
- Exterior scrap metal and/or scrapped metal equipment storage in Zone X; and

- Fluid leaks from transport vehicles parked at loading docks.

These sections will be periodically revised and updated in accordance with the MSGP. Revisions should be made whenever operations change which expose additional materials to storm water or whenever a new material is added or removed in significant amounts.

## **6.2 Description of Exposed Significant Materials**

Worksheet #3A describes the significant materials that were exposed to storm water during the three years prior to submission of the NOI, or are currently exposed. This worksheet includes information on:

- Method and location of on-site storage;
- Materials management practices used in the 3 years prior to submission of the NOI to minimize contact with storm water;
- Location and description of existing structural and non-structural control measures to reduce pollutants in the storm water runoff;
- Description of any treatment the storm water receives; and
- Other on-site storm water management practices.

**Worksheet 3A**  
**Description of Exposed Significant Material**

<b>DESCRIPTION OF EXPOSED SIGNIFICANT MATERIAL</b>		<b>Worksheet #3A</b> Completed by: <u>Mike Karavolis</u> Title: <u>Safety and Health Director</u> Date: <u>August 2015</u>			
<p>Instructions: Based on your material inventory, describe the significant materials that were exposed to storm water during the three years prior to submission of the NOI and/or are currently exposed. Significant Materials: include, but are not limited to: raw materials; fuels; materials such as solvents, detergents and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substance designated under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have a potential to be released with storm water discharges [22.26(b)(12)].</p>					
<b>Description of Exposed Significant Material</b>	<b>Period of Exposure</b>	<b>Quantity Exposed (Units)</b>	<b>Location (as indicated on Drainage Area Site Map)</b>	<b>Method of Storage or Disposal (e.g., pile, drum, tank)</b>	<b>Description of Material Management Practice (e.g., pile covered, drum sealed)</b>
Zone X - Exposure of scrap metals and oil coated equipment.	2012-2015	Undetermined	Zone X	Scrap metals are currently stored in open top 30 cubic yard roll-off containers.	Scrap metals are sorted and deposited into open top metal roll off dumpsters.
Oil and fluid drippage from vehicles at loading docks	2012-2015	Undetermined	General Loading Docks (Buildings 3 and 4)	Not Applicable	Storm water accumulated in loading dock containment areas is inspected prior to being pumped to storm drains

## **7 DESCRIPTION OF PAST SPILLS AND LEAKS**

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In accordance with Section 4.2.5 of the MSGP, a record of all significant spills/leaks of oils, hazardous materials, or hazardous wastes exceeding reportable quantities that have occurred at the facility in the 3 years prior to the date of submission of the NOI is maintained. This record is maintained by the Safety and Health Director and is updated as necessary.

There have been no spills that have exceeded a reportable quantity in the three years prior to the submission of the NOI.

## **8 NON-STORM WATER AND SANITARY WASTEWATER DISCHARGES**

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### **8.1 Non-Storm Water Discharge Assessment and Certification**

In accordance with Section 5.2.3.4 of the MSGP, the SWPPP must include a certification that all discharges have been tested or evaluated for the presence of non-storm water. Worksheet #5 is a formal certification concerning the testing or evaluation conducted for the presence of non-storm water discharges. This certification includes an identification of potential significant sources of non-storm water runoff at the site, a description of the results of any evaluations, the date(s) conducted, and the drainage points observed.

Based on a review of the facility's site plans, historical dye testing performed on the storm water drainage system, and information provided by EMS personnel, the following determinations have been made:

- The drainage areas associated with EMS operations are limited to the roof portions of Buildings 3 and 4, a narrow strip of land (approximately 8 feet in width) surrounding each building, the Zone X area, and the Building 3 loading dock.
- Storm water runoff from the Building 3 roof, loading docks, and the Building 4 roof, discharges to Outfall 002 located to the southwest;
- The EMS property lies on the watershed divide between the Ten Mile River and Taunton River Watersheds.
- Based on historical dye testing by Texas Instruments (TI), it has been determined that Outfalls 001 and 002 discharge to the Ten Mile River Watershed via Speedway Brook. The Ten Mile River flows into the Seven Mile River which eventually discharges to Narragansett Bay in Rhode Island. Outfalls 004 and 005 are discharged to an unnamed brook which flows into Coopers Pond. Coopers Pond discharges to the Wading River, which discharges to the Taunton River. Final discharge from the Taunton River is to Narragansett Bay.
- All roof leaders discharge storm water runoff overland to storm water outfalls.
- Based on extensive dye testing and bacterial monitoring, TI has determined that all domestic sanitary wastewater (restrooms) from the site discharges to the municipal



sanitary sewer system and the Publicly Owned Treatment Works (POTW), operated by the City of Attleboro.

- Non-storm water discharges are generated by the following activities: hydrant flushings, air conditioner condensate, and steam condensate. In addition, based on previous site investigations, TI/EMS has detected the presence of low concentrations of chlorinated volatile organic compounds and MTBE at Outfalls 002 and 004. The detection of these contaminants is attributed to the infiltration of untreated groundwater into the storm drain system. From limited data available, it appears that the concentrations of the various constituents fluctuate due to factors such as flow, time, and season. This information has been provided to EPA and is not associated with current EMS operations.
- Due to the siting of EMS operations, the potential exists for runoff containing pollutants from other building tenants to commingle with runoff from EMS. The main sources of storm water pollutants migrating onto EMS property from other tenants would include but not be limited to the following:
  - ◆ Spills resulting from transport of hazardous materials and wastes over roadways;
  - ◆ Drillage of oil and various fluids from vehicles traveling and parking on the campus roadways and parking lots;
  - ◆ Sediment from on site sanding operations and localized soil erosion;
  - ◆ Release from aboveground pipelines carrying fuel oil and diesel fuel from bulk storage tanks located at Building 6;
  - ◆ Spills occurring during loading of diesel fuel ASTs associated with the emergency generator located within Zone X area on the west side of Building 10;
  - ◆ Release from electrical transformers or trash compactors located outside of Buildings 3 and 4.

**Worksheet 5  
Non-Storm water Discharge Assessment and Certification**

<b>NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION</b>		<b>Worksheet #5</b>			
		<b>Completed by:</b> <u>IT Corporation</u> <b>Title:</b> <u>Environmental Consultant</u> <b>Date:</b> <u>October 2001</u>			
<b>Date of Test or Evaluation</b>	<b>Outfall Directly Observed During the Event</b>	<b>Method Used to Test or Evaluate Discharge</b>	<b>Describe Results from Test for the Presence of Non-Storm Water Discharge</b>	<b>Identify Potential Significant Sources</b>	<b>Name of Person Who Conducted the Test or Evaluation</b>
April 2001	Refer to Site Plan	Review of site plans by EMS personnel and previous dye testing by TI	Storm water runoff from the EMS property is conveyed off site to surface waters via four outfalls (i.e. outfalls 001, 002, 004 and 005) covered under a NPDES permit issued to TI (at the time of the test). The EMS property lies on the watershed divide of the Ten Mile River Watershed and the Taunton River Watershed Based on historical dye testing, it has been determined that Outfalls 001 and 002 discharge to the Ten Mile River Watershed via Speedway Brook. Outfalls 004 and 005 discharge to an un-named brook which flows into Coopers Pond. Outfalls 001 and 005 have no flow	Yes	Don Mikutel, Former EMS Environmental Manager

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION		Worksheet #5 Completed by: <u>IT Corporation</u> Title: <u>Environmental Consultant</u> Date: <u>October 2001</u>			
Date of Test or Evaluation	Outfall Directly Observed During the Event	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
			<p>conditions. All roof leaders discharge storm water runoff overland to storm water outfalls. All domestic sanitary wastewater originating from Buildings 3 and 4 discharges to the municipal sanitary sewer system and the City of Attleboro POTW. The drainage areas associated with EMS operations are limited to the roof portions of Buildings 3 and 4, a narrow strip of land (approximately 8 feet in width) surrounding each building, and the Zone X area.</p> <p>Storm water runoff from the roof, loading dock, and the roof of Building 4, discharges to Outfall 002 located to the southwest. Storm water runoff from the roof of Building 10 and Zone X discharges to Outfall 005 located to the southeast.</p> <p>Non-storm water discharges are generated by the following activities:</p>		

<b>NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION</b>			
<b>Worksheet #5</b> <b>Completed by: <u>IT Corporation</u></b> <b>Title: <u>Environmental Consultant</u></b> <b>Date: <u>October 2001</u></b>			
<b>Date of Test or Evaluation</b>	<b>Outfall Directly Observed During the Event</b>	<b>Method Used to Test or Evaluate Discharge</b>	<b>Name of Person Who Conducted the Test or Evaluation</b>
<b>Describe Results from Test for the Presence of Non-Storm Water Discharge</b>	<b>Identify Potential Significant Sources</b>	<b>Name of Person Who Conducted the Test or Evaluation</b>	
		hydrant flushings, air conditioner condensate, and steam condensate. Through historical site investigations, TI had detected the presence of low concentrations of chlorinated volatile organic compounds and MTBE at Outfalls 002 and 004. The detection of these contaminants is attributed to the infiltration of untreated groundwater into the storm drain system. From limited data available, it appears that the concentrations of the various constituents fluctuate due to factors such as flow, time, and season. This information, which has been provided to EPA, is not associated with EMS operations.	

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION		Worksheet #5 Completed by: <u>IT Corporation</u> Title: <u>Environmental Consultant</u> Date: <u>October 2001</u>			
Date of Test or Evaluation	Outfall Directly Observed During the Event	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
<b>CERTIFICATION</b>					
<p>I, Michael Karavolis, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</p>					
A. Michael Karavolis, Safety and Health Director		B. Area Code and Telephone No. 508-342-2115			
C. Signature		D. Date Signed			

## 9 SITE ASSESSMENT

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In accordance with the MSGP, the SWPPP must identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the facility. The site assessment section of the Plan identifies areas which may have the potential to contribute pollution to storm water run-off.

The information contained in this section will be reviewed and revised as necessary. The SWPP Team is responsible for reviewing facility operations in its annual Comprehensive Site Compliance Evaluation (refer to Section 10). To ensure that the Team has current, up-to-date information on potential areas of concern, the items included on the "Checklist for Keeping Plans Current" (Appendix A) should be reviewed on a regular basis.

Best management practices (BMPs) have been developed for the areas listed below which will be focused on during the evaluations and inspections identified in Section 10. Refer to Section 11 for the BMPs being implemented by EMS.

As previously noted, the EMS-Attleboro site straddles the hydrologic divide between the Ten Mile River and the Taunton River Drainage Areas. The drainage on the West Side of the site generally flows towards the Ten Mile River Basin and on the east, to the Taunton River Basin. The Drainage Area Site Map depicts the on-site drainage areas and associated outfalls. Please note that the storm drainage system occasionally crosses from one drainage zone to another. Area specific drainage calculations (including runoff coefficients) are included in Appendix E.

The storm water drainage system is configured to collect runoff from all portions of the site. There are various controls installed which minimize the potential for storm water pollution (including oil/water separators), so that EMS has a number of opportunities to intercept the release before it enters surface waters.

### 9.1 Areas with the Greatest Potential to Cause Storm water Pollution

The following sections describe the quantities, locations, and flow directions of potential spill sources located at EMS. Locations include the hazardous material and petroleum bulk storage systems, chemical storage areas, hazardous waste storage areas, chemical loading docks, exterior scrap metal storage area (Zone X), and specific components of the

wastewater conveyance system (i.e., piping from equipment to the internal WWT system to the City of Attleboro POTW).

### **9.1.1 High Hazard Operational Areas**

The following is a list of high hazard operational areas where a greater potential for chemical incidents/spills exists due to the nature of the materials processed.

1. Chemical Control Area – Building 3 interior
2. Waste water conveyance systems – Buildings 3 and 4 interiors
3. Flammable Material Storage locker – Building 4 exterior
4. Hazardous waste storage area – Building 3 interior

Chemical use is generally conducted within the confines of each building, thus the potential for storm water pollution is considered to be minimal. However, spills migrating from high hazard operational areas within the buildings to exterior areas would represent the greatest potential for contact with storm water. The first line of defense initiated by EMS personnel would be to prevent the discharge of any oil, hazardous material or hazardous waste from outfalls. EMS would contact an emergency response contractor to respond to any spills migrating to the outside of a building, if the quantity or type of spill could not be safely addressed by EMS personnel.

The Safety and Health Director maintains a complete and updated list of oils and hazardous materials used and stored on-site as well as hazardous wastes generated.

### **9.1.2 Bulk Storage Systems**

As previously noted, the greatest potential for liquid chemical spills exists where oil or hazardous materials are stored, delivered, or handled in bulk. Numerous below grade tanks associated with manufacturing processes are located within Building 4. The tanks which provide mineral based, and hydraulic oils to various manufacturing processes, are located within subsurface containment vaults (oil cellars) that are part of the building foundations. Many of the rolling mills and other heavy equipment in these buildings have associated oil handling areas where machine oil, hydraulic oil and cutting oil is contained and in some cases filtered as part of the equipment operation. In many instances these oil handling tanks, pumps, filters, and process transfer lines are also contained within the oil cellars. The following is a summary of the tanks associated with the Buildings 4 oil cellars.

Location	Oil Type	Volume (gallons)
PT-4 Mill Cellar	Hydraulic	(3) - 200 to 300
PT-4 Mill Cellar	Gear	(1) - 200 to 300
PT-2 Mill Cellar	Lube	(1) - 500
PT-2 Mill Cellar	Hydraulic	(2) - < 250 (total)
ZR-25-1 Oil Cellar	Lube	(1) - 5,000
ZR-25-1 Oil Cellar	Lube	(1) - 3,000
ZR-25-1 Oil Cellar	Lube	(1) - 1,500
ZR-25-1 Oil Cellar	Hydraulic	(1) - 150
ZR-25-1 Oil Cellar	Hydraulic	(2) - 200
ZR-25-2 Cellar	Lube	(1) - 8,000
ZR-25-2 Cellar	Hydraulic	(2) - 200

The oil cellars are of concrete construction similar to the production floor. Investigations have been conducted to verify the construction integrity of these structures.

### 9.1.3 Additional Aboveground Storage Tanks

Numerous smaller above grade reservoirs (generally less than 50 gallons) are also attached to manufacturing equipment located above the oil cellars. Since all of these tanks are located within enclosed and contained portions of the buildings, the greatest potential for storm water pollution would be during the transfer of petroleum-based products utilized in these systems to and from the chemical loading docks.

Additional bulk storage tanks at EMS include exterior ASTs containing liquid nitrogen, liquid propane gas, and liquid hydrogen. In the event of a release from any of these tanks, the liquid would revert to the gaseous state and would not represent a potential for storm water pollution.



#### **9.1.4 Hazardous Waste Storage**

EMS is a Large Quantity Generator of waste oil and hazardous waste. Hazardous waste will be stored temporarily at designated accumulation areas adjacent to the manufacturing process. A centralized hazardous waste staging area has been established in Building 3. All hazardous waste management areas (storage or satellite accumulation), have been designed to prevent the accidental release of oil and hazardous materials and mixing of incompatible materials.

As previously noted, Buildings 3 and 4 have been constructed (concrete floors and walls with no floor drains) to act as secondary containment. In addition, satellite hazardous waste areas are either stored in fabricated secondary containment or within over-packing and managed by an employee trained in hazardous material handling.

The following controls are in place to manage hazardous wastes generated at the facility:

- Wastes are stored in properly marked and labeled DOT containers.
- Adequate aisle space between drums is maintained to allow for visual inspection.
- Containers are inspected weekly to ensure that they are in good condition and are not stored on site for longer than 90 days. Records of the inspections are maintained.
- Chemical Control personnel inspect waste drums received from operational areas within Buildings 3 and 4 prior to transfer to the Building 3 chemical loading dock for shipping.
- Spills occurring in the industrial areas of the facility would be contained within the floor and walls of the building and cleaned up by EMS personnel (if within their capabilities) or the designated Emergency Response Contractor.
- The designated Emergency Response Contractor would be summoned to remediate large volume releases occurring inside or outside of buildings.
- Spills occurring at Building 3 hazardous waste loading dock number would be contained within the impermeable concrete structure.

#### **9.1.5 Site-Wide Hazardous Materials Management Activities**

EMS utilizes various oils and hazardous materials in the manufacturing of its products. Hazardous material management units have been designed to prevent mixing of incompatible materials and accidental release of oil and hazardous materials to the

environment. Fixed hazardous materials management units located at EMS include the Building 3 interior chemical control area and the exterior flammable storage lockers. Additional hazardous materials management units are located throughout the buildings at or near the points of hazardous material usage.

Chemical control at EMS consists of a primary chemical control area located in the interior northeast corner of Building 3 and an exterior chemical control area (flammable storage lockers) located in the northeast corner of the Zone X area behind Building 4. The two separate chemical control facilities have been designed to segregate the various hazards related to EMS chemical storage and allow for the co-location of material with similar hazards in one location.

The primary chemical control area within Building 3 has been designated for storage of non-flammable materials, limited corrosives, and miscellaneous non-regulated chemicals. Materials are stored on tri-level racks equipped with integrated spill control. In addition, specialized lockers are used to store drums containing the inventory classified as poisons. Since this area is located within the confines of the building, the potential for storm water pollution is limited to instances when transfers are conducted to and from the chemical loading dock. Refer to Section 9.1.6 for a description of the chemical loading dock practices.

The exterior chemical control area, consisting of three fire rated chemical storage lockers constructed by Safety Storage Inc., has been established to manage the hazards associated with flammable materials and flammable decanting operations. External transfer of materials to and from the storage lockers represents the greatest potential for spills and storm water pollution. The flammable materials are received at the Building 4 receiving dock and are transferred via fork lift to the flammable lockers. Spills occurring during exterior material transfers would most likely flow to the Building 4 loading dock trench drain where they would be contained and remediated. Decanting of flammable liquids into safety cans is performed inside the flammable storage lockers to minimize the potential for contact with storm water.

Trained Hazardous Material Handlers conduct all hazardous material management. Receiving personnel inspect drums received from suppliers for integrity prior to removal from the delivery vehicle. All managers that utilize chemicals are required to maintain complete up to date listings of each chemical in their area. The Safety and Health Director maintains a complete site wide listing and an SDS database with SDS's for each chemical used on site.

### **9.1.6 Oil and Chemical Loading/Unloading Facilities**

EMS utilizes one ramped area for the majority of oil and chemical bulk deliveries. This ramp (designated as Door 4-13), located on the south side of Building 4, is designed such that a release would be fully contained. Each containment area is de-watered after each precipitation event, per Spill Control De-Watering Procedures and is inspected weekly. Housekeeping is conducted, as necessary to remove litter, debris and sediment. The containment areas have been designed to prevent the contents from entering the subsurface. Routine inspections and corrective actions are conducted to maintain the integrity of the containment structure.

The chemical loading dock contains a dock leveler equipped with a piston supplied via single reservoir (containing 2-4 gallons of hydraulic oil). Trucks back up to a sealed and padded gasket to keep precipitation from contacting materials being transferred.

### **9.1.7 Scrap Metal Storage**

An area located in the exterior southeast corner of Building 4 (Zone X) is used for the storage of scrapped metal equipment (e.g. metal lockers, desks, miscellaneous manufacturing equipment etc.) commonly referred to as low value scrap iron. Smaller scrap metal pieces are deposited in 30-cubic yard rolloffs (which are unsealed and uncovered) while larger pieces are stored directly on a concrete pad. All pieces (some covered with traces of oil from processing) are fully exposed to storm water and represent a potential for storm water pollution.

Scrap metals generated as a result of manufacturing processes are also accumulated in this area. The metals, including nickel, aluminum, copper, and stainless steels, are also stored in open and unsealed rolloff containers and are fully exposed to precipitation. The primary source of pollution resulting from storm water contact with these materials would be oily residues and metal filings. The potential for leaching of elemental metals from the scrap metal pieces exists, but is highly unlikely to occur.

Other sources of storm water contamination existing in this area include empty drums, minor amounts of sediment loading due to soil erosion, and deterioration of shipping containers, primarily wood skids and crates.

Two sections of the Zone X area are unpaved and in various stages of erosion. Storm water runoff across these sections can carry small amounts of sediment to storm drains. Miscellaneous wood shipping materials (in various stages of deterioration) are also stored in this area. The decomposition of these materials may increase BOD levels of storm water.

Surface grading within the Zone X area generally directs storm water runoff away from scrap metal storage containers. The trench drain at the base of the loading dock connects to a dry sump. Various fluids leaking from trucks parked at the loading dock accumulate in this trench drain. The trench drain and dry sump are de-watered (using manually activated pump) to a storm drain after each precipitation event, per Spill Control De-Watering Procedures. This drainage area discharges to Coopers Pond via Outfall 005.

BMPs established by EMS for minimization of storm water pollution in the Zone X area include regular sweeping to reduce sediment loading, metal filings and debris, as well as frequent removal of wooden shipping materials to minimize decomposition of the wood.

## 9.2 Other Areas of Potential Storm water Pollution

### 9.2.1 Oil Containing Equipment

#### Electrical Transformers

There are several oil filled electrical transformers adjacent to EMS property, which are owned and maintained by other operating entities.

#### Trash Compactors

Located on both ends of the facility are trash compactors, each of which has a capacity of 50 cubic yards. Since EMS places trash compactors into spill containment, the potential exists for pollution of storm water in the event of a release. The trash compactors are placed on level concrete pads within the shipping and receiving docks. The compactors, quantity of oil stored, existing spill control and associated drainage zones are included in the following table.

**Trash Compactors**

Figure Key	Number	Maximum Quantity (gallons)	Spill Control	Drainage Zones
TC-3A	1	<5	None	II
TC-4A	1	<5	None	IV

#### Diesel Emergency Generators and Tanks

There is a one-diesel emergency generator located on the exterior west side of Building 10 which is owned and managed by the current owner of that building. EMS has no ownership or maintenance responsibility for this generator, but failure of the fuel storage container could result in contamination of EMS property, as the container is located immediately adjacent to the property boundary.

### **9.2.2 Wastewater Pipelines**

EMS operates an internal network of wastewater pipelines and pumps that are utilized to transport wastewater from process areas to the wastewater treatment plant in the back of Building 4. Treated water is discharged to the City of Attleboro Public Owned Treatment Works, per the current discharge permit. The following controls have been engineered for the wastewater conveyance system:

- Wastewater transfer piping is located above ground and constructed of poly-lined steel, or schedule 80 CPVC.
- The concentrated acid and cyanide wastewater piping is constructed of teflon-lined steel.
- All wastewater system components including pumps and lift stations undergo regular scheduled preventative maintenance.
- Spills from interior wastewater piping would flow onto the floor and be contained within the building.
- The discharge line that connects the EMS WWT plant and the sewer line is located along the interior wall above the Receiving Dock. A catastrophic failure of this line would result in a release of pre-treated water into the interior of Building 4, and would require immediate attention. Discharges to the POTW are made manually and discretely (i.e. not continuously) and are only made when an appropriately licensed WWT operator is present. This process eliminates the potential for a spill from the discharge lines to go unnoticed while a discharge to the POTW is being made, and during minimal operations staffing periods.

### **9.2.3 General Use Loading Docks**

EMS has two general use loading docks for non-chemical deliveries. These loading docks are not equipped with secondary containment. All other loading docks are equipped with dock levelers, each with cylinders served by a single reservoir containing 2-4 gallons of hydraulic oil. The loading dock door numbers, number of dock levelers at each and the

associated trash compactor, quantity of oil stored in each compactor and drainage zone are included in the following table.

#### General Use Loading Docks

Door Number	Number of Levelers	Trash Compactor	Maximum Quantity (gallons)	Drainage Zones
3-3	0	0	0	I
3-9	0	0	0	I
4-16	1	0	4	V
4-17	1	0	4	V
4-18	1	0	4	V
4-19	1	0	4	V

In accordance with EMS standards, general loading docks are not intended for the delivery of hazardous materials; consequently, these loading docks have not been equipped with secondary containment. The general loading docks are made of asphalt and concrete construction. Any releases at the general loading docks would flow onto the concrete and asphalt at the dock site thus representing a potential for pollution of storm water. The designated emergency response contractor would be activated to remediate these releases.

#### 9.2.4 Process Emissions

##### Air Emission Sources

Operations at the EMS facility that generate air emissions include the following: acid and caustic cleaning lines, mechanical cleaning, drying, buffing, metal processes (including machining, bonding, rolling, cleaning, and drying), sheet metal slitting, acid marking, furnaces and heaters, and a variety of manufacturing support activities. Details about emission sources at the EMS facility are available in the most recent Source Registration Report.

For storm water considerations, air emission sources are evaluated relative to their potential to deposit organic or inorganic particulates in the vicinity of the exterior exhaust points such that the material could be re-entrained during a storm water event into the runoff. EMS utilizes a visual inspection program to identify any noticeable buildup of material around any emission exhaust point. Areas of primary concern include the following:

## **Heat Treat Oil Seal Bell Furnaces**

A specialized heat treat operation, referred to as the oil seal bell furnaces, utilizes an oil seal to maintain high temperature process atmosphere pressure. Only one of the twenty two bell annealing furnaces uses oil as the sealing medium. All other bell furnaces have been converted to water seals. The oil seal bell furnace has an oil emission of less than 0.025 tons per year, due to dragout of the oil sealing medium. A high efficiency air filter (HEAF) controls the emissions. Through a visual inspection program, EMS assures that the HEAF control system is functioning properly and that there is no buildup of oil droplets on the roof adjacent to the exhaust point. The HEAF control system is regularly maintained, and is shutdown twice per year for disassembly, cleaning, and filter replacement.

### **9.3 Provisions for EPCRA Section 313 Water Priority Chemical Management**

The MSGP requires that facilities subject to reporting under The Emergency Planning and Community Right to Know Act of 1986 (EPCRA) Section 313 for water priority chemicals must contain special provisions addressing where the chemicals are stored, processed and handled. The special requirements focus on areas of the facility where equipment used for the management, storage, and processing of Section 313 water priority chemicals is exposed to precipitation or can otherwise contribute pollutants to the storm water system. The permit states that appropriate containment, drainage control, and/or diversionary structures must be provided for such areas. The following controls for areas used to store water priority chemicals have been implemented at EMS.

EMS uses a wide variety of chemicals, including a number of listed SARA Section 313 chemicals, in its manufacturing, support and R&D operations. All of the chemicals present in amounts that exceed the reporting thresholds are reported in the Tier Two Emergency and Hazardous Chemical Inventory. EMS has constructed a facility in which these materials can be used safely, and has trained employees in the safe use and disposal of these materials. Policies have been established to ensure that as new chemicals and processes are added, the new chemicals are read with the same high regard for safety.

BMPs established by EMS for SARA Section 313 chemicals consist of two differing, but complementary approaches both of which serve to eliminate the potential for these materials to pollute storm water. These two approaches are (1) design of the facility to prevent release to the exterior environment and (2) the establishment of institutional/administrative controls to manage the proper use and disposal of hazardous chemicals and solvents.

- (1) Physical Plant Design -- The EMS facility has been constructed with a number of "Best Available" controls at locations where SARA Section 313 chemicals are

stored, processed and handled. Drum storage of these chemicals is contained within one of two specially designed buildings. The primary chemical control area in Building 3 and the exterior flammable chemical control lockers are equipped with extensive spill containment. All other chemicals are delivered either as raw materials in alloys/metals (copper, nickel, chromium, iron, etc.) or as small packages that are received through chemical control. Shipping/receiving of these chemicals occurs at a specially designed chemical loading dock (Door 4-13) that is also equipped with spill control. EMS personnel inspect and empty the containment areas of water after each storm event. In the manufacturing areas, established chemical storage and waste accumulation areas have been constructed and properly identified to ensure the safe storage of hazardous materials.

- (2) Institutional/Administrative Controls -- EMS has developed a number of policies and procedures to ensure that hazardous materials are used and disposed of in the proper manner. The primary policy in this effort is the Standard Administrative Procedure for Hazardous Material Control. This policy establishes a procedure for the periodic review of hazardous materials usage by the Safety and Health Director. This policy also restricts or denies the usage of certain hazardous materials, prevents new materials from being used on the site until a review has occurred, and ensures that EMS employees are trained to properly use and dispose of the hazardous material approved for use in their areas. In practice, this prevents the use of unapproved chemicals and the use of chemicals in areas not approved for their use.



## **10 SWPPP INSPECTIONS AND EVALUATIONS**

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The members of the SWPP Team will be conducting inspections and evaluations to make sure that EMS:

- Complies with the current plan
- Documents changes that may trigger plan revisions.

Required inspections include an annual comprehensive site compliance evaluation, and routine quarterly equipment.

### **10.1 Routine Facility Inspections**

The Safety and Health Director will ensure that a quarterly visual assessment or routine inspection of areas of the facility where industrial materials or activities are exposed to storm water is performed by the SWPPP Team. At least once per year, the routine facility inspection shall be performed during a precipitation event.

The inspections must include an evaluation of existing storm water BMPs. The following potential sources of pollutants should be addressed in the inspection. The inspection must include all areas where industrial materials are exposed to storm water and areas where spills and leaks have occurred within the past three years, control measures, and discharge points. Inspectors should look for the following:

- Industrial materials, residue or trash on the grounds that could contaminate or be washed away in storm water;
- Leaks or spills from industrial equipment, drums, barrels, tanks or similar containers;
- Offsite tracking of industrial materials or sediment where vehicles enter or exit the site;
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
- Control measures needing replacement, maintenance or repair;

- Evidence of, or the potential for, pollutants entering the drainage system
- Areas associated with the storage of raw metals;
- Roof drainage areas;
- Maintenance areas; and
- Long term and short term chemical and hazardous waste storage areas.

Results of both visual inspections and any analytical monitoring performed during the year must be taken into consideration during the evaluation. Storm water BMPs identified in the SWPPP must be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they must be inspected to see whether BMPs are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations must be inspected if possible.

The SWPP Team will complete a Site Compliance Evaluation Form following each inspection (See Figure 10-1). The form should be copied and the copy should be completed during the inspection. The forms will be maintained as a record of the inspection.

Following the inspection, the SWPP Team, headed by the Safety and Health Director, will prepare a report summarizing the following:

- Who made the inspection;
- The scope of the inspection; and
- When the inspection was made;
- Observations relating to the implementation of the SWPPP (includes location(s) of pollutant discharges from the site; location(s) of BMPs that need to be maintained; location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional BMPs are needed that did not exist at the time of the inspection);
- Any incidents of non-compliance;
- Corrective actions required;
- Corrective actions taken; and

- Date completed

These Facility Inspection reports must be signed by the Safety and Health Director, and kept as part of the SWPP Plan for at least three years from the date that permit coverage expires or is terminated.

Inspections should be documented using the Comprehensive Site Compliance Evaluation Tracking Form (Figure 10-2). The Safety and Health Director will prepare a set of tracking procedures to make sure that appropriate actions are taken in response to these inspections.

Based on the results of the inspection, the facility must modify the SWPPP as necessary to include additional or modified BMPs designed to correct problems identified. Any actions found to be necessary as a result of these or any other inspections must be incorporated into the description of potential pollutant sources and pollution prevention and control measures identified in the SWPP Plan within 14 calendar days following the inspection. If existing BMPs need to be modified or if additional BMPs are necessary, implementation must be completed before the next anticipated storm event, if practicable, but not more than 12 weeks after completion of the evaluation. These inspection reports are to be kept in the SWPPP File. For additional information pertaining to plan updates refer to Appendix A.

EMS must document in the SWPPP the results of the inspections and the corrective actions taken in response to any deficiencies or identified opportunities for improvement. The reports must identify any incidents of non-compliance.

Where an inspection does not identify any incidents of non-compliance, the report must be replaced with a certification that the facility is in compliance with the SWPPP and the MSGP. Refer to Figure 10-4 for the Facility Compliance Certification Form.

## **10.2 Quarterly Visual Inspection**

The Safety and Health Director will also ensure that a quarterly visual assessment of storm water quality is performed by the SWPPP Team. Documentation of the visual assessment must include:

- Sample location
- Sample collection date and time, and visual assessment date and time for each sample;

- Personnel collecting the sample and performing the visual inspection, and their signature;
- Nature of the discharge (rain or snow melt)
- Results of observation of the storm water discharge
- Probable sources of any storm water contamination
- If applicable, why was it not possible to collect sample within 30 minutes of start of precipitation event
- A statement, signed and certified in accordance with Appendix B, Subsection 11 of the 2015 MSGP.
- Loading and unloading areas;
- Equipment storage areas;
- All process and material handling equipment (e.g., conveyors, cranes and vehicles) for leaks, drips, or the potential loss of material; and
- Material storage areas (e.g., piles, bins for storing scrap metals) for signs of material losses due to wind or storm water runoff.

The facility must correct any deficiencies in implementation of the SWPPP as soon as practicable, but not later than within 14 days of the inspection. Records of the inspections will be maintained for at least 3 years from the date that permit coverage expires or is terminated. Refer to Figure 10-3 for the Quarterly Inspection Form. The Safety and Health Director will prepare a set of follow-up procedures to ensure that appropriate actions will be taken as a result of the inspection findings.

**Figure 10-1  
Facility Inspection Form**

**Name of Inspector:** \_\_\_\_\_

**Date of Inspection:** \_\_\_\_\_

Location	Observation	Corrective Actions Required	Corrective Actions Taken	Date Completed
Site wide - industrial materials, residue or trash that could contaminate or be washed away in storm water				
Leaks from industrial equipment, drums, barrels, tanks or other containers				
Off site tracking of industrial materials or sediment				
Evidence of or potential for pollutants entering drainage system				
Raw and scrap metals storage areas				
Maintenance areas				

Location	Observation	Corrective Actions Required	Corrective Actions Taken	Date Completed
Long term chemical and hazardous waste storage areas				
Short term chemical and hazardous waste storage areas				

Weather conditions during inspection: \_\_\_\_\_

Signature of Person Conducting Inspection: \_\_\_\_\_

Duly Authorized Representative's Signature: \_\_\_\_\_

NOTE: Upon completion, file in the SWPPP file







**Figure 10-3**  
**Quarterly Inspection Form**

**Name of Inspector:** \_\_\_\_\_ **Date of Inspection:** \_\_\_\_\_

Location	Observation	Corrective Actions Required	Corrective Actions Taken	Date Completed
Air pollution control equipment/stack and vent surfaces				
Hazardous waste storage areas				
Raw, and finished metal storage areas				
Loading and unloading areas				
Equipment storage areas				
Process equipment				
Chemical control areas				
Wastewater pumps and pipelines				
Scrap metal storage area				

Location	Observation	Corrective Actions Required	Corrective Actions Taken	Date Completed
Unvegetated surfaces				
Roof and emission control equipment exterior surfaces				

Signature of Person Conducting Inspection: \_\_\_\_\_

Safety and Health Director Signature: \_\_\_\_\_

NOTE: Upon completion, file in the SWPPP file

## **11 BEST MANAGEMENT PRACTICES (BMPs) IDENTIFICATION AND IMPLEMENTATION**

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This Section describes the Best Management Practices (BMPs) currently being implemented by EMS. Continued adherence to these BMPs will minimize the potential for storm water pollution.

BMPs have been developed in the following categories to assist the Facility in preventing storm water from coming into contact with operations or materials that would cause pollution:

### **Good Housekeeping**

- Good housekeeping practices are maintained by all EMS Employees to insure safe work conditions and to minimize pollutant discharges at the site.
- Housekeeping and safety inspections are conducted on a routine basis to detect faulty equipment and potential safety hazards.
- Garbage and waste materials are collected before containers are filled or overflowing in order to prevent off site tracking or blowing.
- All containers, drums and bags are stored away from direct traffic routes to prevent accidental spills; containers are stored on pallets or similar containment devices to prevent corrosion.
- Materials put into the dumpsters are drained of fluids and dumpsters remain covered at all times.
- All containment areas are inspected weekly and housekeeping is conducted, as necessary.

### **Chemical Controls**

- Chemical inventories are carefully controlled and maintained on a regular basis. A physical inventory of the chemical warehouse is completed at a minimum of once per week, and a system has been devised to track chemical delivered to the manufacturing operations.

- All chemicals are evaluated for use on site by the Safety and Health Director to protect employees from exposure. Evaluations include review of SDSs, ventilation requirements, required personal protective equipment, treatment options, off site disposal options, pollution abatement controls and potential for spills or release and storage requirements.
- An on-line SDS database is maintained for each chemical used on site. The SDS database can be accessed 24/7 from any computer connected to the intranet. A CD of the database contents is created annually and is maintained by the Safety and Health Director for use when the on-line database is not accessible.
- All capital packages that incorporate hazardous materials or that generates hazardous materials (e.g. process chemicals, solvents, wastewater, solid waste, by product scrap, hazardous waste etc.) require the approval of the Safety and Health Director.
- All chemical containers are labeled with contents, hazard warnings, target organs and stored only in designated containment areas.
- Daily inspections are made in chemical control areas to insure the integrity of the containers.
- On site storage of empty drums is minimized.
- Chemicals are stored in designated areas that have adequate spill containment capabilities to ensure that incompatible chemicals cannot come in contact with one another.
- All chemical control areas (e.g. flammable storage lockers and cabinets, oil stands, hazardous waste accumulation areas etc.) must be maintained according to EMS's safety standards (i.e. labeling, spill containment, compatibility etc.).
- Each area supervisor is required to maintain an up to date listing of all of the chemicals in that area. Listings of chemicals are managed and updated on a regular basis by the Safety and Health Director.
- In accordance with regulations pertaining to Large Quantity Generators, hazardous waste inspections are conducted on a weekly basis to insure compliance (i.e. drums are labeled, sealed, not leaking, have adequate spill containment, etc).
- Annual hazardous waste management training is provided to employees who handle hazardous waste as part of their job requirements.

### **Toxic Use Reduction**

- EMS will strive to continually improve the efficiency of its manufacturing capability to eliminate hazardous byproducts from its manufacturing operations.

### **Preventative Maintenance**

- As part of the Safety Program, EMS employees perform safety audits in each of the manufacturing and service operations that are involved in the program, to detect faulty equipment, potential safety hazards, fire and housekeeping issues. Depending on the results of the audits the operations may be required to establish corrective action programs to address any of the audit items observed.
- All plant equipment is on a scheduled prevention maintenance program in order to prevent breakdowns and to maintain a proper inventory of replacement parts.
- The facility utilizes an on-line program known as e-Maint to track equipment maintenance schedules, breakdowns, and work requests.
- Routine inspections and repairs are conducted to maintain the integrity of all containment areas.

### **Spill Prevention and Response**

- A SOP for unloading/loading bulk liquid chemicals is followed by all truck drivers and material handlers.
- Spill containment materials including storm drain covers, absorbents and other spill clean-up equipment are readily available in identified Spill Kits located at Doors 3-17 and 4-19 in the facility.
- High hazardous awareness maps are available for each building and are under the control of the Safety and Health Director.
- Outside contractors will manage all spills that are outside of the capabilities and training for EMS personnel.
- EMS has an SPCC/Contingency Plan to deal with incidents involving bulk chemical storage areas, fuel oils and hazardous waste.
- All bulk storage containers of chemicals and fuels are mounted within spill containment with adequate capacity for the size of the storage vessel. These containment areas are inspected on a weekly basis. Any accumulated storm

water is monitored for oil sheen, VOCs and pH before being discharged to a storm water outfall.

- Smoking or any other source of ignition is prohibited from the delivery area during transfers of flammable or explosive materials, and is only permitted in designated smoking areas outside of the buildings.
- Delivery trucks are required to turn off engines, chock rear wheels, set the hand brake, and leave the vehicle in low gear prior to commencing product transfers.
- The containment area has been designed to prevent contents from entering the subsurface.
- Obsolete equipment is drained of any oil or chemical reservoirs and are wiped clean prior to being placed outside or being placed on a vehicle for transportation to another facility.

#### **Security**

- The EMS Facility is protected by a badge access system that prevents access to the facility by unauthorized people. The facility is manned 24 hours per day, seven days a week by operations employees, and/or Maintenance personnel that are trained to respond to all alarm situations.
- Adequate facility lighting is provided to discourage acts of vandalism and to help in the identification of spills.
- Gates on the exterior of the buildings are locked at night to prevent unauthorized access.

#### **Sediment and Erosion Control**

- Regular sweeping is performed in the Zone X area and other areas where particulate matter, dust or debris may accumulate.
- Paving will be considered for areas where vehicular traffic or material storage occurs, but where vegetative or other stabilization methods are not practicable.
- Sidewalks and curbing throughout the site act as conveyances for storm water runoff.
- Those outfalls that discharge directly to the surface waters or wetlands are lined with stone to slow down the discharges and reduce erosion.

## **Inspections**

- Storm drains, loading docks, and process equipment are checked daily for possible chemical contamination due to leaks or malfunctions
- All loading dock spill containment areas which receive chemical deliveries are inspected and kept clean and free of contaminants.

## **Management of Runoff**

- The loading docks are enclosed minimizing the potential to be exposed to storm water.
- All manufacturing processes are operated and maintained so as to minimize any discharges to the environment (i.e., hard piped to industrial wastewater treatment plant or abated by scrubbers, rotoclones, carbon etc).
- Storm water does not come in contact with any raw materials, products, chemicals or waste materials except in the previously described Zone X area.
- Roof drains disperse storm water runoff over paved surfaces directly to the storm drains.

## 12 MONITORING AND REPORTING PROGRAM

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According to the requirements of the MSGP, EMS is required to conduct both quarterly sampling and analysis (benchmark monitoring) and quarterly visual monitoring of their storm water. The quarterly benchmark monitoring is required because the facility is within an industrial sector which has been determined to have a high potential to discharge a pollutant at concentrations of concern. The quarterly visual monitoring is required for all facilities conducting industrial activities covered under the MSGP.

### 12.1 Quarterly Benchmark Monitoring

In accordance with the MSGP, monitoring requirements have been developed for facilities engaging in Primary Metals and Fabricated Metal Products. For the current term of the MSGP (June 4, 2015 to June 4, 2020) quarterly benchmark monitoring is required for the four consecutive quarters starting with the fourth quarter of 2015 (October 1 – December 31, 2015).

Analysis of collected samples must comply with 40 CFR Part 136 Analytical Methods.

The locations designated as being representative of storm water runoff from industrial activities at the facility are as follows:

- Sample location No. 1 storm drain located in the center of the Zone X scrap metal and skids exterior storage area, straight out the back of the building from Door 4-13. This location is intended to be representative of storm water runoff from raw and scrap material transfers at the Building 4 loading dock, residual drippage of fluids from delivery vehicles, and exterior storage of scrap metals in the Zone X area. Roof drain discharges from a portion of Building 4 would also be captured in the sample.

This location has been chosen since it best represents runoff generated by EMS activities. Refer to the Drainage Area Site Map (Figure 1) for sample collection location.



The following table indicates the required parameters (by sector) for the sampling location.

Sector	Benchmark Monitoring Required	Sampling Locations Where Required	Benchmark Monitoring Cutoff Concentration
F-Primary Metals, Subsector F1	Total Aluminum	1 and 2	0.75 mg/L
	Total Zinc	1 and 2	See Note 1
F-Primary Metals, Subsector F3	Total Copper	1 and 2	See Note 1
	Total Zinc	1 and 2	See Note 1

**Note 1**

<sup>1</sup> The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6 2 1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Copper (mg/L)	Zinc (mg/L)
0-25 mg/L	0.0038	0.04
25-50 mg/L	0.0056	0.05
50-75 mg/L	0.0090	0.08
75-100 mg/L	0.0123	0.11
100-125 mg/L	0.0156	0.13
125-150 mg/L	0.0189	0.16
150-175 mg/L	0.0221	0.18
175-200 mg/L	0.0253	0.20
200-225 mg/L	0.0285	0.23
225-250 mg/L	0.0316	0.25
250+ mg/L	0.0332	0.26

If the average of four monitoring values for any parameter *does not exceed* the benchmark, the monitoring requirements for that parameter have been fulfilled for that parameter for the permit term.

If the average of four samples does exceed the benchmarks, EMS is required to follow up with corrective action investigation and either

- (1) Modify control measures and continue quarterly monitoring until an average of four consecutive samples are less than the benchmark, or
- (2) Determine that no further reductions are technologically available and economically practical and achievable in light of best industry practice, and continue to monitor once per year. The rationale for this determination must be documented, and records of the determination shall be kept with the SWPPP.

The results of benchmark monitoring are primarily for the facility's use in determining the overall effectiveness of the SWPPP in controlling the discharge of pollutants to receiving waters. An exceedance of a benchmark value does not, in and of itself, constitute a violation of the permit, but it does signal that modifications to the SWPPP may be necessary. EMS cannot be cited for exceeding the benchmark limits, but CAN be cited for not responding with corrective actions to a benchmark exceedance.

All benchmark monitoring data results need to be submitted to the EPA through the electronic NDPES eReporting Tool (NeT) within 30 days of receipt of the laboratory results. If multiple samples are collected in a single quarter (due to adverse weather conditions, climates with irregular storm water runoff, or areas subject to snow), you are still required to report all results to the EPA through the NeT within 30 days of receiving the laboratory results.

When benchmark monitoring exceeds the benchmark limits, a copy of the monitoring results along with a copy of the corrective actions required and undertaken to meet the benchmark limits, must be sent to the Massachusetts Department of Environmental Protection, Bureau of Waste Prevention, 20 Riverside Drive, Lakeville, MA 02347.

Along with the results of the monitoring, EMS must provide the date and duration (in hours) of the storm event(s) samples; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; and the time (in days) since the previous measurable storm event. For snow melt monitoring, you must identify the date of the sampling event.

A minimum of one grab sample from each location must be taken. All such grab samples must be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previous storm even that generated a discharge. The grab sample should be collected during the first 30 minutes of when the discharge begins (or as soon thereafter as practicable, but not to exceed one hour). If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and EMS must record the reasons why collecting a grab sample during the first 30 minutes was impracticable.

If EMS is unable to collect samples within the specified sampling period due to adverse climatic conditions (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, extended frozen conditions, etc.) a substitute sample from a qualifying event in the next period may be submitted, or four samples per monitoring year when weather conditions do not allow for samples to be spaced evenly during the year.

These samples may be collected in conjunction with the Quarterly Visual Examination of storm water outlined in Section 12.3. Documentation of the quarterly benchmark monitoring will be indicated on the Quarterly Visual Monitoring Form (Figure 12-1).

Records of monitoring information must include:

- The date, exact place and time of sampling or measurements;
- The duration and estimated amount of precipitation from the rain event;
- The amount of time since the last precipitation event;
- The initials or name(s) of the individual(s) who performed the sampling or measurements;
- The date analyses were performed;
- The time analyses were initiated;
- The initials or name(s) of the individual(s) who performed the analyses;
- References and written procedures, when available, for the analytical techniques or methods used; and
- The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc. used to determine these results.

## **12.2 Sampling Data**

In accordance with the MSGP, EMS must provide a summary of existing storm water discharge sampling data taken at the facility. A summary of historical sampling results and all sampling data collected during the term of this permit will be maintained in Appendix H.

## **12.3 Quarterly Visual Monitoring**

The Safety and Health Director will ensure that a visual examination of the storm water discharge from each outfall is conducted and documented. Examinations must be conducted during daylight hours of facility operation and coinciding with a rainfall or snowmelt runoff event at least once per calendar quarter.

The samples will be collected from the same locations as those designated for the quarterly benchmark monitoring (Refer to Section 12.1).

Visual examinations will be made of one grab sample from each location. All such grab samples must be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previous storm event that generated a discharge. The grab sample should be collected during the first 30 minutes of when the discharge begins (or as soon thereafter as practicable, but not to exceed one hour). If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and EMS must record the reasons why collecting a grab sample during the first 30 minutes was impracticable.

The examinations will be documented using the Quarterly Visual Monitoring Form (Figure 12-1) and maintained on-site in the SWPPP. The documentation will include:

- Visual observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators or storm water pollution;
- Probable sources of any observed storm water contamination;
- Examination date and time;
- Examination personnel; and
- The nature of the discharge (i.e., rainfall runoff or snowmelt).

To maintain a certain measure of consistency in the examinations, it is preferable, where practical, to have the same individual carry out the examination of storm water discharges for the life of the permit.

In the event that an examination cannot be carried out for a given period due to adverse climatic conditions (i.e., drought or extended frozen conditions), the reason for not performing the visual examination must be documented.

Figure 12-1

Quarterly  
Visual Monitoring Form

Site: \_\_\_\_\_ Date: \_\_\_\_\_

Benchmark Monitoring Conducted: Yes No

Time: \_\_\_\_\_ Outfall Location: \_\_\_\_\_

Number of Days since Last Storm Event That Generated a discharge: \_\_\_\_\_  
(Must be greater than 72 hours)

Quantity of Storm Event: \_\_\_\_\_ inches

Length of Storm Event: \_\_\_\_\_ hours

Type: Catchbasin \_\_\_ Manhole \_\_\_ Outfall \_\_\_ Open Channel \_\_\_  
Other (describe) \_\_\_\_\_

Flow Observed: Yes No

Visual Observations of Discharge:

Discharge Type: Rain \_\_\_ Snow Melt \_\_\_\_\_

Odor: None \_\_\_ Musty \_\_\_ Sewage \_\_\_ Rotten Eggs \_\_\_ Petroleum \_\_\_ Other: \_\_\_\_\_

Clarity: Clear \_\_\_ Cloudy \_\_\_ Opaque \_\_\_ Suspended Solids \_\_\_ Settled Solids \_\_\_ Other: \_\_\_\_\_

Color: \_\_\_\_\_ Oil Sheen Observed: Yes No

Floatables: None \_\_\_ Sheen \_\_\_ Garbage/Sewage \_\_\_ Foam \_\_\_ Other: \_\_\_\_\_

Probable Sources of Contamination: \_\_\_\_\_

Comments: \_\_\_\_\_

Signature of Inspector(s): \_\_\_\_\_

Signature of Safety and Health Director: \_\_\_\_\_

## **Figure 12-1 (continued)**

### **Quarterly Visual Monitoring**

#### **SAMPLING INSTRUCTIONS FOR QUARTERLY VISUAL MONITORING**

- Collect samples from each outfall or from locations where storm water reaches a confluence at a man made or natural channel prior to entering a storm sewer system or discharging to a surface water body. Collect samples from locations that are within the boundaries of the facility property and under the control of the facility.
- Collect samples in a clean glass jar so that an accurate visual examination of the storm water sample can be performed.
- Conduct sampling and visual examinations during facility operations in the daylight hours during a rainfall or snowmelt runoff event.
- Collect samples within the first 30 minutes (or as soon thereafter as practicable, but not to exceed one hour) of when the runoff or snowmelt begins discharging.
- Collect samples from the discharge resulting from a storm event occurring at least 72 hours from the previous storm event that generated a discharge.
- Samples are required to be collected on a quarterly basis. However, given that the frequency of allowable storm events varies significantly, conduct sampling as close to the quarterly schedule as can be reasonably achieved given anticipated weather conditions. Conduct examinations in each of the four quarterly calendar periods.

When samples cannot be taken in one or more of the examination periods as a result of adverse climatic conditions (i.e., drought, extended frozen conditions, or dangerous sampling conditions), document the reason for not performing the visual examination under the Comments section of Figure 12-1.

Where practicable, the same individual should carry out the collection and examination of discharges for the life of the permit.

## **13 EMPLOYEE TRAINING**

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Under the MSGP, employee-training programs must be provided for all employees that work in areas where industrial materials or activities are exposed to storm water and for employees that are responsible for implementing activities identified in the SWPPP. The training may be included as part of any other employee training sessions conducted at the facility. Training will address topics such as spill response, good housekeeping and material management practices and will inform employees of the goals and components of the SWPPP.

General training will be given to all levels of personnel at the facility, to ensure that every employee has complete and accurate information on how to carry out the BMPs. This training may be incorporated into other training sessions such as hazardous waste management or Spill Prevention. The training will focus on educating employees on:

- Goals and contents of the SWPPP, including introduction of the Pollution Prevention Team
- Hazards of storm water pollution.
- Practices for preventing pollution discharge, including good housekeeping and materials management.
- Procedures for responding to and reporting an incident in which oil or significant materials may have been released, including activation of the Emergency Response Team or the spill contractor.
- Health and safety rules.

A record of this training will be kept in the Facility's employee training files.

The following elements will be discussed in the employee-training program:

- Environmental/Incidents Spills
  - Review Information/Report Presented
- Review Housekeeping Practices

- Review Material Disposal Practices
- Review where spill clean-up equipment is stored and how to use it.

The SWPPP Team will have an annual meeting. Discussion topics for this meeting will be as follows:

- Environmental Incidents/Spills
  - Overall Assessment of Performance and Response
  - Critique
  - Information/Report Presented
  - Annual Drills
- BMP Philosophies and Protocols
  - New
  - Modified
- Training
  - Use of spill response and containment equipment
  - Use of Emergency Response Plan
  - Emergency Contractor Procedures
  - Mandatory Program Modifications (in accordance with federal/state/local authorities)
  - Materials handling and storage
- Information about Health and Safety Risks



## **14 RECORD KEEPING**

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The Safety and Health Director will maintain records on-site pertaining to storm water pollution prevention. The records will be kept in the SWPPP file. The specific information to be maintained is listed below.

Copies of the SWPPP (including any modifications made during the term of the permit), documentation related to corrective actions taken, all reports and certifications required by this permit, monitoring data, inspections, and records of all data used to complete your NOI to be covered by this permit, must be kept for a period of at least three years from the date that your coverage under this permit is expires or is terminated.

### **Plan Updates**

- Keep copies of the checklist entitled "Keeping Plans Current" and the blank sheet for recording changes to the Plan (both located in Appendix A).

### **SWPPP Roster and SWPPP Team**

- Maintain copies of Worksheet #1 and revise as necessary to reflect changes in personnel and responsibilities.

### **Site Plan**

- Revise as necessary to reflect facility changes.

### **Significant Material Inventory**

- Maintain copies of Worksheet #3 and revise or update whenever operations, usage or storage involving significant materials change.

### **Description of Exposed Significant Materials**

- Maintain copies of Worksheet #3A and update or revise regularly to reflect material exposure during the three-year period prior to the effective date of the storm water general permit.

### **Description of Spills/Leaks**

- The spill history for the site will be revised in the event that any new spills occur.

### **Spill Reporting**

- Maintain copies of all federal, state and local spill reports pertaining to storm water.

### **Training**

- Maintain all employee-training records pertaining to the Storm Water Pollution Prevention Plan.

## **APPENDIX A WHEN TO UPDATE THE SWPPP**

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The MSGP call for the SWPP Plan to be a “living document” that changes as often as necessary to protect the environment and to reflect current conditions at the facility. Federal regulations require the SWPP Plan to be revised for any of the following reasons:

- In response to any change in design, construction, operation, or maintenance of the facility which has a significant effect on the discharge, or potential for discharge, of pollutants from the facility.
- If during any inspection, monitoring, or investigation by EMS personnel, or by federal, state or local officials it is determined that the SWPPP is ineffective in eliminating or minimizing pollutants from sources identified or is otherwise not achieving the general objectives of controlling pollutants in discharges from the facility.

To help EMS meet this requirement, this section contains:

- A checklist to assist employees in updating the Plan.
- An update sheet to record changes made during the interim between formal Plan amendments.

## CHECKLIST FOR KEEPING PLANS CURRENT

If there are any changes in the following areas, the SWPPP must be revised:

### Initial/Date

- \_\_\_\_\_  If during inspections, monitoring, or investigations by EMS personnel, or by federal, state or local officials it is determined that the SWPPP is ineffective in eliminating or minimizing pollutants from sources identified or is otherwise not achieving the general objectives of controlling pollutants in discharges from the facility.
- \_\_\_\_\_  Quarterly Inspection results in the need for revision of potential pollutant sources and/or pollution prevention measures and controls identified in the SWPPP.
- \_\_\_\_\_  Pollution prevention team organization and/or responsibilities.
- \_\_\_\_\_  Potential pollution sources.
- \_\_\_\_\_  Inventory of exposed materials (quantities or types of materials).
- \_\_\_\_\_  New significant spills or leaks of toxic or hazardous pollutants that have occurred in areas exposed to precipitation or that drain to a storm water conveyance at the facility.
- \_\_\_\_\_  Storm water sampling data.
- \_\_\_\_\_  Storm water management measures and controls including good housekeeping practices, preventative maintenance procedures, spill prevention and response procedures, inspections, employee training, record keeping and internal reporting procedures, non-storm water discharges, sediment and erosion controls, and runoff management practices.
- \_\_\_\_\_  The design, construction, operation, or maintenance of the facility that has a significant effect on the potential for pollutant discharge to storm water.

**NOTE: Upon completion, file a copy in the SWPPP file**

### Plan Updates

Section of Plan	Revision/Addition	Date	Date Incorporated into Plan <sup>1,2</sup>	By?
1 Introduction				
2 General Information				
3 SWPPP Team				
4 SWPPP and SPCC Plan Overlap				
5 Site Plan				
6 Significant Material Inventory				
7 Description of Past Spills and Leaks				
8 Non-Storm water and Sanitary Wastewater Discharge				
9 Site Assessment				
10 SWPPP Inspections and Evaluations				
11 BMP Identification and Implementation				
12 Monitoring and Reporting Program				
13 Employee Training				
14 Record Keeping				

<sup>1</sup> After changing Plan, be sure to change the date on the pages of the section changed, so you can be sure the Plan contains the most current information.

<sup>2</sup> Be sure to revise plan within two (2) weeks of comprehensive site compliance evaluation inspection and incorporate changes within twelve (12) weeks of inspection. Also, revise plan whenever there is a change in the design, construction, operation, or maintenance of the facility that has a significant effect on the potential for pollutant discharge to storm water or if the SWPPP proves ineffective.

**NOTE: Upon completion, file a copy in the SWPPP file**

## **APPENDIX B GLOSSARY**

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### **Hazardous Substance:**

- 1) Any material that poses a threat to human health and/or the environment. Hazardous Substances can be toxic, corrosive, ignitable, explosive, or chemically reactive.
- 2) Any substance named, required by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or if otherwise emitted into the environment.

### **Hazardous Wastes:**

By-products of human activities that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosively, reactivity, or toxicity), or appears on special EPA lists.

### **MSGP:**

Multi-Sector General Permit.

### **NOI:**

Notice of Intent

### **Petroleum Product:**

All naturally occurring hydrocarbons whether gaseous, liquid or solid and there associated by-products.

### **Releases:**

Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment.

**Reportable Quantity (RQ):**

The quantity of a hazardous waste, hazardous material, or oil that triggers reporting requirements under CERCLA of the Clean Water Act. If a substance is released in amount exceeding its RQ, the release must be reported to the National Response Center, the State Emergency Response Commission, and community Safety and Health Director for areas likely to be affected. Refer to USEPA Reportable Quantities of Hazardous Substances and Massachusetts Oil and Hazardous Materials List (MOHML) for the Reportable Quantity List.

**Secondary Containment:**

Structures, usually dikes or berms, surrounding tanks or other storage containers and designed to catch spilled material from the storage containers.

**Significant Materials:**

Include, but are not limited to: raw materials; fuels; materials such as solvents, detergents and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under 101(14) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have a potential to be released with storm water discharges.

**Significant Spills:**

Include, but are not limited to releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the CWA.

**Waters of the United States:**

- (a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate "wetlands";
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - 1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

- 2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
- 3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of water otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States.

**Note:** Definitions obtained from USEPA, Storm Water Pollution Prevention Plan Manual, September 1992.



**APPENDIX C**

**COPY OF EPA NOTICE OF INTENT (NOI) FORM SUBMITTED FOR STORM WATER  
DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY UNDER A NPDES MULTI-  
SECTOR GENERAL PERMIT**





# 2015 NPDES Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSGP) Forms

United States Environmental Protection Agency  
1200 Pennsylvania Ave, NW Washington, DC 20460

Note: This is a "smart form"; as you fill out the form, additional questions will appear that you will need to answer.

## Permit Information

1. What action would you like to take? \*

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in the Facility Operator Information section of this form requests authorization to discharge pursuant to the NPDES Stormwater Multi-Sector General Permit (MSGP) permit number identified in the Permit Information section of this form. Submission of this NOI also constitutes notice that the operator identified in the Facility Operator Information section of this form meets the eligibility conditions of Part 1.1 of the MSGP for the facility identified in the Facility Information section of this form. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

Operator Name (Organization Name)

Operator Name as Noted by the NOI Preparer

2. Select the state/territory where your facility is located \*

3. Is your facility located on Indian Country lands? \*

Yes

No

4. Are you requesting coverage as a "federal operator" as defined in Appendix A? \*

Yes

No

5. Are you a new discharger or a new source as defined in Appendix A? \*

Yes  No

5a. Have stormwater discharges from your facility been covered previously under an NPDES permit? \*

Yes  No

5aa. Provide your most current NPDES ID (i.e., permit tracking number) if you had coverage under EPA's MSGP 2008 or the NPDES permit number if you had coverage under an EPA individual permit \*

MAR05CW22

6. Do you directly discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 3 water (Outstanding Natural Resource Water) (See Appendix U)? Your project will be considered to discharge to a Tier 3 water if the first water of the US to which you discharge is identified by a state, tribe, or EPA as a Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first water of the US to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system. \*

Yes  No

7. Does your facility directly discharge to a Federal CERCLA site listed in Appendix P? For the purposes of this permit, a permittee discharges to a Federal CERCLA site if the discharge flows directly into the site through its own conveyance, or through a conveyance owned by others, such as a municipal separate storm sewer system. \*

Yes  No

8. Has the Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filing this NOI, as required? \*

Yes  No

9. By indicating "Yes", I confirm that I understand that the MSGP only authorizes the allowable stormwater discharges in Part 1.1.2 and the allowable non-stormwater discharges in Part 1.1.3. Any discharges not expressly authorized under the MSGP are not covered by the MSGP and they cannot become authorized by disclosure to EPA and/or a state via this Notice of Intent to be allowable stormwater and non-stormwater discharges listed in Parts 1.1.2 and 1.1.3 will be discharged, they must be covered under another NPDES permit. \*

Yes  No

10. Master Permit Number

MAR050000

A: Facility Operator Information

1. Operator Name (Organization Name) \*

[Redacted]

2. Street \*

39 Perry Avenue

3. Supplemental Address

[Redacted]

4. City \*

Attleboro

5. State \*

MA

6. Zip Code \*

02703

7. Facility County or Similar Govt. Subdivision \*

Bristol

8. Phone (10-digits, No dashes) \*

5083422115

9. Extension

[Redacted]

10. E-Mail \*

mkaravolis@emsclad.com

Operator point of contact information

11. First Name \*

Michael

12. Middle Initial

G

13. Last Name \*

Karavolis

14. Professional Title \*

Safety and Health Director

B: Facility Information

1. Facility Name \*  
Engineered Materials Solutions, LLC  Facility address same as facility operator address

2. Street/Location \*  
39 Perry Avenue

3. Supplemental Address

4. City \* Attleboro 5. State \* MA 6. Zip Code \* 02703 7. Facility County or Similar Govt. Subdivision \* Bristol

Latitude/Longitude for the facility:

8. Latitude (Decimal Degrees) \* 41.9498 9. Longitude (Decimal Degrees) \* 71.2721 10. Latitude/Longitude Data Source \* GPS 11. Horizontal Reference Datum

12. What is the ownership type of the facility \* Privately Owned Facility 13. Estimated area of industrial activity at your facility exposed to stormwater (to the nearest quarter acre) \* 14.5

Identify the applicable sector and subsector of your primary industrial activity (See Appendix D) that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSQP, and the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code:

15. Sector \* SECTOR F: PRIMARY METALS 16. Primary SIC Code \* 3316: Cold Finishing Of Steel Shapes

17. Subsector F1: Steel Works, Blast Furnaces, and Rolling and Finishing Mills

18. Identify the applicable sector(s) of any co-located industrial activity for which you are requesting permit coverage.

Sector Subsector

Add Sector

22. Is your facility presently inactive and unstaffed? \*  
 Yes  No

C: Discharge Information

1. Does your facility discharge into any saltwater receiving waters? \*  
 Yes  No 2. What is the hardness of your receiving water(s) (see Appendix J) \*  
0-24.99 mg/L

Outfalls

4. List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.

A. Outfall ID \*  +  B. Latitude (Decimal Degrees) \*  C. Longitude (Decimal Degrees) \*

**Lookup Receiving Waters Information**  
 (This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

**Outfall Section**

1. Provide the name of the first water of the U.S. that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) \*

Speedway Brook

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? \*

Yes  No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group \*  Pollutant \*

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group \*  Pollutant \*

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group \*  Pollutant \*

**Add Impairment Pollutant Associated with this Waterbody**

3. Has a TMDL been completed for this receiving waterbody? \*

Yes  No

**Outfalls**

4. List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.

A. Outfall ID \*  +  B. Latitude (Decimal Degrees) \*  C. Longitude (Decimal Degrees) \*

**Lookup Receiving Waters Information**  
 (This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

D. Substantially identical to Any Outfalls Listed Above? \*

Yes  No

E. Substantially identical to outfall ID \*

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

5. Multiple Receiving Waters were returned for your outfall. Please select the receiving water that is associated with your outfall from this list: \*

SPEEDWAY BROOK

Outfall Section

1. Provide the name of the first water of the U.S. that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) \*

SPEEDWAY BROOK

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? \*

Yes  No

4. List the pollutants that are causing the impairment:

Pollutant

AQUATIC MACROINVERTEBRATE BIOASSESSMENTS

Delete Pollutant

Pollutant

DISSOLVED OXYGEN

Delete Pollutant

Pollutant

Coliform, fecal general

Delete Pollutant

Pollutant

HABITAT ASSESSMENT (STREAMS)

Delete Pollutant

Pollutant

SEDIMENTATION/SILTATION

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? \*

Yes  No

**Outfalls**

4. List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.

A. Outfall ID \*  +  B. Latitude (Decimal Degrees) \*  C. Longitude (Decimal Degrees) \*

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? \*

Yes  No

E. Substantially identical to outfall ID \*

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

5. Multiple Receiving Waters were returned for your outfall. Please select the receiving water that is associated with your outfall from this list: \*

Coopers Pond

**Outfall Section**

1. Provide the name of the first water of the U.S. that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) \*

Coopers Pond

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? \*

Yes  No

3. Has a TMDL been completed for this receiving waterbody? \*

Yes  No

**Outfalls**

4. List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.

A. Outfall ID \*  +  B. Latitude (Decimal Degrees) \*  C. Longitude (Decimal Degrees) \*

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? \*

Yes  No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.



5. Multiple Receiving Waters were returned for your outfall. Please select the receiving water that is associated with your outfall from this list \*

Unnamed Waterbody

Outfall Section

1. Provide the name of the first water of the U.S. that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) \*

Unnamed Waterbody

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? \*

Yes  No

3. Has a TMDL been completed for this receiving waterbody? \*

Yes  No

Add Another Outfall

Provide the following information about your outfall latitude longitude.

5. Latitude/Longitude Data Source \*

GPS

6. Horizontal Reference Datum

NAD83

7. Does your facility discharge into a Municipal Separate Storm Sewer System (MS4)? \*

Yes  No

8. Do you discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) (See Appendix L)? \*

Yes  No

D: Stormwater Pollution Prevention Plan (SWPPP) Information

SWPPP Contact Information

1. First Name \*

Michael

2. Middle Initial

G

3. Last Name \*

Karavolis

4. Professional Title \*

Safety and Health Director

5. Phone (10-digits, No dashes) \*

5083422115

6. Extension

7. E-Mail \*

mkaravolis@emsciad.com

8. Your current SWPPP or certain information from your SWPPP must be made available through one of the following two options. Select one of the options and provide the required information. \*

Note: You are not required to post any confidential business information (CBI) or restricted information (as defined in Appendix A) (such information may be redacted), but you must clearly identify those portions of the SWPPP that are being withheld from public access.

Option 1: Maintain a Current Copy of your SWPPP on an Internet page (Universal Resource Locator or URL).

Provide the web address URL \*

Option 2: Provide the following information from your SWPPP.

**E: Endangered Species Protection**

1. Using the instructions in Appendix E of the MSGP, under which endangered species criterion listed in Part 1.1.4.5 are you eligible for coverage under this permit? \*

2. Provide a brief summary of the basis for the criterion selected in Appendix E (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service to determine no species in action area; implementation of controls approved by EPA and the Services). \*

**F: Historic Preservation**

1. If your facility is not located in Indian country lands, is your facility located on a property of religious or cultural significance to an Indian tribe? \*

Yes  No

2. Using the instructions in Appendix F of the MSGP, under which historic properties preservation criterion listed in Part 1.1.4.7 are you eligible for coverage under this permit? \*

**Certification Information**

Certifier E-Mail \*

Confirm Certifier: pduffy@emsclad.com \*

**APPENDIX D  
DRAINAGE AREA CALCULATIONS**

Drainage Area Outfall	Total Area (acres)	Impervious Area (acres)	% Impervious
001	2.26	1.84	81.42
002	30.42	23.52	77.32
003	City of Attleboro Storm Water System		
004	71.70	21.30	29.71
005	49.01	22.77	46.46

**Assumptions:**

- Impervious surfaces are paved = 0.9 Runoff Coefficient (C)
- All other surfaces consist of lawn coverage with average slope = 0.2 Runoff Coefficient (C)
- Discharges to Outfall 005 consist of water treatment plant effluent only and would not have a Runoff Coefficient (C)

**FORMULA USED TO DETERMINE RUNOFF COEFFICIENT (C)**

$$\frac{A_1C_1 + A_2C_2 + \dots + A_nC_n}{\sum_{i=1}^n A_i}$$

Where A = area in acres and C = Runoff Coefficient



#### **Drainage Area 001**

$$C = \frac{1.84 \times 0.9 + 0.42 \times 0.2}{1.84 + 0.42} = \frac{1.74}{2.26} = 0.77$$

#### **Drainage Area 002**

$$C = \frac{23.52 \times 0.9 + 6.9 \times 0.2}{23.52 + 6.9} = \frac{22.55}{30.42} = 0.74$$

#### **Drainage Area 004**

$$C = \frac{21.30 \times 0.9 + 50.40 \times 0.2}{21.30 + 50.40} = \frac{29.25}{71.70} = 0.41$$

#### **Drainage Area 005**

$$C = \frac{22.79 \times 0.9 + 26.24 \times 0.2}{22.77 + 26.24} = \frac{25.74}{49.01} = 0.52$$

#### **Conclusions**

The areas draining to Outfalls 001 and 002 have a high Runoff Coefficient (>65%) and the areas draining to Outfalls 004 and 005 have a medium Runoff Coefficient (40 to 65%).

**APPENDIX E**

**MULTI-SECTOR GENERAL PERMIT**

**APPENDIX F**

**CERTIFICATION AND ELIGIBILITY DOCUMENTATION FOR ENDANGERED SPECIES ACT  
AND HISTORIC PRESERVATION ACT**

**APPENDIX G**  
**SAMPLING DATA**





## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 COMMERCIAL STREET, SUITE 300  
CONCORD, NH 03301  
PHONE: (603)223-2541 FAX: (603)223-0104  
URL: [www.fws.gov/newengland](http://www.fws.gov/newengland)

Consultation Code: 05E1NE00-2015-SLI-1838

August 27, 2015

Event Code: 05E1NE00-2015-E-02324

Project Name: EMS SWPPP

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.



A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

A biological assessment is required for construction projects for water quality protection. This assessment is required for projects that are located in the riparian zone of a stream or river. The purpose of this assessment is to identify potential impacts of the project on the stream and to develop measures to avoid, minimize, or compensate for these impacts. The assessment should include a description of the project, a description of the stream, and a description of the potential impacts. The assessment should also include a description of the measures that will be taken to avoid, minimize, or compensate for the impacts.

The assessment should be completed before construction begins. The assessment should be updated if there are changes to the project or the stream. The assessment should be used to guide the design and construction of the project. The assessment should also be used to monitor the impacts of the project on the stream and to evaluate the effectiveness of the measures that are taken to avoid, minimize, or compensate for these impacts.

### Biological Assessment Report

The assessment should be completed before construction begins. The assessment should be updated if there are changes to the project or the stream. The assessment should be used to guide the design and construction of the project. The assessment should also be used to monitor the impacts of the project on the stream and to evaluate the effectiveness of the measures that are taken to avoid, minimize, or compensate for these impacts.

The assessment should be completed before construction begins. The assessment should be updated if there are changes to the project or the stream. The assessment should be used to guide the design and construction of the project. The assessment should also be used to monitor the impacts of the project on the stream and to evaluate the effectiveness of the measures that are taken to avoid, minimize, or compensate for these impacts.

The assessment should be completed before construction begins. The assessment should be updated if there are changes to the project or the stream. The assessment should be used to guide the design and construction of the project. The assessment should also be used to monitor the impacts of the project on the stream and to evaluate the effectiveness of the measures that are taken to avoid, minimize, or compensate for these impacts.



United States Department of Interior  
Fish and Wildlife Service

Project name: EMS SWPPP

## Official Species List

**Provided by:**

New England Ecological Services Field Office

70 COMMERCIAL STREET, SUITE 300

CONCORD, NH 03301

(603) 223-2541

<http://www.fws.gov/newengland>

**Consultation Code:** 05E1NE00-2015-SLI-1838

**Event Code:** 05E1NE00-2015-E-02324

**Project Type:** \*\* OTHER \*\*

**Project Name:** EMS SWPPP

**Project Description:** EMS property area plus discharge locations of storm water piping

**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



## Office of the Dean

November 13, 1964

Mr. J. Edgar Hoover  
Federal Bureau of Investigation  
Washington, D. C. 20535

Dear Mr. Hoover:

I am writing to you in response to your letter of November 10, 1964, regarding the activities of the Communist Party, U.S.A., in the Chicago area.

I am enclosing for you a copy of the report of the Chicago Police Department dated November 10, 1964, which contains information regarding the activities of the Communist Party, U.S.A., in the Chicago area.

I am also enclosing for you a copy of the report of the Chicago Police Department dated November 10, 1964, which contains information regarding the activities of the Communist Party, U.S.A., in the Chicago area.

I am sure that this information will be helpful to you in your investigation of the activities of the Communist Party, U.S.A., in the Chicago area.

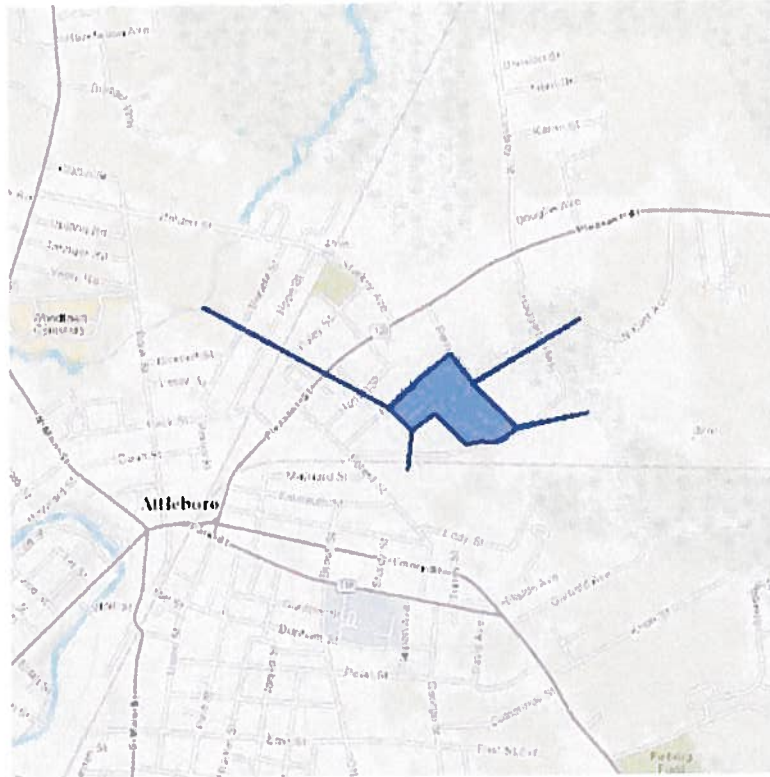
I am sure that this information will be helpful to you in your investigation of the activities of the Communist Party, U.S.A., in the Chicago area.



United States Department of Interior  
Fish and Wildlife Service

Project name: EMS SWPPP

**Project Location Map:**



**Project Coordinates:** MULTIPOLYGON (((-71.27134680747986 41.94958046278435, -71.27069234848021 41.948958067066, -71.26625061035156 41.950920986768935, -71.27067625522614 41.94894210812151, -71.26891136169434 41.94758558323819, -71.2659502029419 41.948032441682095, -71.26593947410583 41.94800052332568, -71.26890063285828 41.94754568501054, -71.26949071884155 41.94725043734973, -71.2698769569397 41.94715468105798, -71.27037048339842 41.94717064044992, -71.27099275588989 41.94707488403832, -71.27225875854492 41.94804840085429, -71.27318680286407 41.9475057867579, -71.27337455749512 41.946276908348295, -71.27340137958527 41.9462808982516, -71.27321362495422 41.9475057867579, -71.2741470336914 41.948207992356615, -71.28178864717484 41.95131994679697, -71.27413630485533 41.94821597192126, -71.27273082733154 41.94922936851086, -71.27162575721741 41.94985176158034, -71.27134680747986 41.94958046278435)))

**Project Counties:** Bristol, MA

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES

1964

REPORT OF THE  
COMMISSION ON THE  
ORGANIZATION OF THE  
PHYSICAL SCIENCES  
AT THE UNIVERSITY OF CHICAGO





United States Department of Interior  
Fish and Wildlife Service

Project name: EMS SWPPP

## Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat ( <i>Myotis septentrionalis</i> )	Threatened		



### Statement of Officer [Name]

On [Date] at [Location], I observed [Description of Incident]

[Detailed description of the incident, including names of individuals involved, actions taken, and observations made.]

Officer Name	Officer ID	Signature	Date



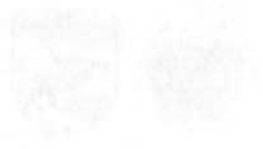
United States Department of Interior  
Fish and Wildlife Service

Project name: EMS SWPPP

## **Critical habitats that lie within your project area**

There are no critical habitats within your project area.

James C. ...  
...



...

# New England Rivers and subwatersheds where ESA-listed shortnose and Atlantic sturgeon occur (created 5/26/2015)

