STORMWATER POLLUTION PREVENTION PLAN

Department:		Effective Date	Department Number:		
Environmental Health and Safety			1700		N/A
Originator/Date:	Approved/Date:	Approved/Date:	Approved/Date:	Approved/Date:	Approved/Date:
February 22, 2017 Steve Roberge Sr. Director of EHS	February 22, 2017 Hilary Matthews EHS Manager		type name type function	type name type function	type name type function

Process Area: **COMMON**

DOCUMENT REVISION RECORD

REV	CHG #	CHANGE DESCRIPTION	CHG BY	CHG DATE	CHKD BY
A	D77722	RELEASE TO RECORDS	J. Chittick	Sept 28, 2005	S. Roberge
B	D84612	Updated plan	S. Roberge	August 1, 2007	J. Chittick
C	D89200	Updated plan	J. Chittick	January 5, 2009	S. Roberge
D	D89653	Revised Policy statement; Added Control measures for Hazardous Waste Storage Area; Eliminate references to impaired waterway requirements; Schedule and requirements for annual report	S. Roberge	June 3, 2009	H. Matthews
E	D805641	Revised records, spill history, contact and facility information, and control measures	S. Roberge	March 3, 2011	H. Matthews
F	D812863	Updated employee information. Updated spill history	H. Matthews	Dec 10, 2012	S. Roberge
G	D822869	Updated employee information, SWPPP team members, Updated spill history, Updated storm water exposures, Added Snow Removal Equipment as a seasonal Exposure, along with control measures	S. Roberge	March 31, 2015	H. Matthews
H	D825080	Updated to comply with 2015 Multi-sector General Permit	S. Roberge	August 26, 2015	H. Matthews
J	D831560	Updated Personnel Information; Added input category of “Weather Conditions” to forms in Appendices A and B; changed description of 999001795 on Page 3 to march Glovia description; removed hyperlink on Page 32	S. Roberge	Feb. 22, 2017	H. Matthews

PURPOSE

The purpose of this plan is to comply with the U.S. Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES), storm water multi-sector general permit for industrial activities.

POLICY

It is the policy of Axcelis Technologies to manage its Stormwater in compliance with legal and other requirements.

SCOPE

This document applies to the Axcelis facility located at 108 Cherry Hill Drive in Beverly, Massachusetts.

RESPONSIBILITIES

Pollution Prevention Team – implement and maintain the storm water pollution prevention plan. Additional/specific responsibilities are outlined in the **PROCEDURE**.

DEFINITIONS

N/A

RECORDS

Record Title	Form # (if any)	Retention Place	Minimum Retention Period	Disposition
Current SWPPP	NA	SmarTeam, EHS Shared Drive – Storm Water Folder, http://www.axcelis.com/about-us/swppp		
Copy of the 2015 MSGP	NA	EHS Shared Drive – Storm Water Folder http://www.axcelis.com/about-us/swppp	Duration of the Permit + 3 years	Destroy
Copy of Notice of Intent (NOI)	eNOI	EHS Shared Drive – Storm Water Folder http://www.axcelis.com/about-us/swppp	Duration of the Permit + 3 years	Destroy
Letter from EPA acknowledging receipt of NOI	NA	EHS Shared Drive – Storm Water Folder http://www.axcelis.com/about-us/swppp	Duration of the Permit + 3 years	Destroy
Figures 1, and 2 (listed below)	NA	EHS Shared Drive – Storm Water Folder http://www.axcelis.com/about-us/swppp	Duration of the Permit + 3 years	Destroy

Endangered Species and Historical Sites information	NA	EHS Shared Drive – Storm Water Folder http://www.axcelis.com/about-us/swppp	Duration of the Permit + 3 years	
Monitoring Results	NA	EHS Shared Drive – Storm Water Folder	Duration of the Permit + 3 years	Destroy
Annual TSS Results for Impaired Waters	NA	EHS Shared Drive – Storm Water Folder http://www.axcelis.com/about-us/swppp	Duration of the Permit + 3 years	Destroy
Inspection Reports	NA	EHS Shared Drive – Storm Water Folder	Duration of the Permit + 3 years	Destroy
Training Records	NA	UL PureSafety LMS Database	Duration of the Permit + 3 years	Destroy
Maintenance Records	NA	Facilities Preventive Maintenance System	Duration of the Permit + 3 years	Destroy
Annual Report to EPA	NA	EHS Shared Drive – Storm Water Folder	Duration of the Permit + 3 years	Destroy

ATTACHMENTS

Figures
1 – Site Location Map
2 – Facility Drainage Plan and Property Boundary

Appendix A Stormwater Examination Report Form
Appendix B Facility Inspection Report Form
Appendix C Facility Contingency Plan – Axcelis Document #9900290
Appendix D Copy of MSGP-2015
Appendix E Full USGS Salem Quadrangle #999001795

REFERENCES

- UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) MULTI-SECTOR GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY (MSGP), Effective June 4, 2015
- Axcelis Document 9900283 – “Operational Control”
- Axcelis Document 999000965 – “Evaluation of Compliance”

PROCEDURE

See plan as follows.

STORM WATER POLLUTION PREVENTION PLAN
AXCELIS TECHNOLOGIES, INC.
108 CHERRY HILL DRIVE

Beverly, MA 01915-1088

February 22, 2017

Prepared By:

MR. STEVEN ROBERGE
DIRECTOR, ENVIRONMENTAL, HEALTH & SAFETY
AXCELIS TECHNOLOGIES, INC.
108 CHERRY HILL DRIVE
BEVERLY, MA 01915-1088

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This Certification serves to designate the following position as an authorized person for signing reports, storm water pollution prevention plans and certifications required by the permit:

Steven Roberge, Senior Director, Environmental Health and Safety

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 submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kevin Brewer
Executive Vice President and Chief Financial Officer
Axcelis Technologies, Inc.

Signature

August 26, 2015

Stormwater Pollution Prevention Plan 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 submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Steven Roberge
Name (Type or Print)
Axcelis Technologies, Inc.

Signature

Director, Environmental Health and Safety
Title

February 22, 2017
Date Signed

Next Required Update: January, 2018

SECTION 1.0: SUMMARY

This Storm Water Pollution Prevention Plan (SWPPP) was developed for Axcelis Technologies, Inc. (Axcelis) of Beverly, Massachusetts to comply with the U.S. Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES), storm water multi-sector general permit (MSGP) for industrial activities. Axcelis produces manufacturing equipment for the semiconductor industry (SIC Code 3559, NAICS Code 333242). As such, it is included in Sector AB – Transportation Equipment, Industrial or Commercial Equipment Facilities.

The purpose of this SWPPP is to address situations at Axcelis where spillage or inadvertent release of raw materials, intermediate products, finished products, byproducts or waste material may contact storm water discharge from the property and cause contamination of nearby waterways.

A storm water site assessment of the facility identified relatively few sources of potential storm water pollution. The primary sources are:

- The storage building for flammable liquids and liquid hazardous wastes;
- The solid hazardous waste storage area adjacent to the storage building;
- Discharge stacks for the Cell 4 refurb shop exhaust
- The shipping/receiving area with enclosed loading docks;
- The outdoor scrap materials/recycling storage area.

There are two points of storm water discharge from the site. Outfall #1 carries all of the storm water associated with industrial activity. Outfall #1 discharges to the Beverly municipal separate storm water system (MS4) in Conant Street. This storm water eventually drains to the Bass River, in the section designated as “Headwaters west of Wenham Lake, Beverly to the outlet of "Lower Shoe Pond" north of Route 62, Beverly. This section has been designated an impaired waterway by the State of Massachusetts with no Total Maximum Daily Limit (TMDL) established as of the 2012 report. The only pollution related impairment to this section is turbidity. This section of the Bass River is also impaired as a Fish Passage Barrier (a non-pollutant impairment).

Outfall #2 is not associated with industrial activity (4 storm drains from the Cherry Hill Drive auto entrance road (all truck traffic enters via the Sam Fonzo Drive entrance) and employee parking area feed this outfall. Outfall #2 discharges to the Beverly municipal separate storm water sewer system in Cherry Hill Drive. This storm water drains to a holding pond in the Danvers portion of Cherry Hill Park, and eventually to the Frost Fish Brook in Danvers.

Axcelis designated its potential action area to include Axcelis’ property, the Danvers Cherry Hill Park holding pond and the Bass River from the discharge of the MS4 to the entrance of the Shoe Pond. Axcelis has assessed its potential action area as described in Appendix E - Procedures Relating to Endangered Species Protection of the MSGP.

According to the US Fish and Wildlife Service (FWS), there is one threatened species (Northern long-eared Bat Myotis septentrionalis), and no critical habitat in the potential action area. Since the applicable portion of the Bass River is designated as impaired as a Fish Passage Barrier, there is no impact to aquatic species as designated by the National Marine Fisheries Service (NMFS).

According US EPA Region 1, where there are no discharge-related activities planned at a facility (e.g., siting and construction of stormwater control structure), the northern long eared bat is not considered to be included within facility's action area. The FWS Official Species list letter is included in the EHS Shared Drive, Storm Water Folder.

According to inquiries made to the Beverly town offices, the Axcelis property is not located in an area designated for federal or state protection of historic places. A log on our inquiry is included in the EHS Shared Drive, Storm Water Folder

The facility was evaluated for the presence of discharges other than storm water (a.k.a. non-storm water discharges) on December 17, 2008. Outfalls #1 and #2 were evaluated by reviewing current building drawings showing storm water and wastewater plumbing designs. HVAC condensate was the only allowable non-stormwater source identified

The property is either paved or landscaped with vegetation. There are no sources of particulates contaminating the runoff due to soil erosion. Visual Sampling data collected according to the 2008 MSGP indicated no apparent contaminants beyond natural materials such as pollen, vegetative matter and small amounts of sand.

In the past three years, the current management practices have been generally effective in preventing and/or minimizing pollution of storm water. There were two (2) spills at Axcelis during the past 4 years (i.e. since August, 2012). One release involved a discharge of hydraulic oil onto pavement. The other involved the rupture of a 5 gallon pail of Latex concentrate on the ATC fan deck. Up to 1.5 gallons of the material may have leaked to the floor drain which leads to the stormwater collection system. All releases were immediately contained and affected areas and structures were promptly cleaned. Details on the release events are provided in Section 4.3.

Visual assessments of storm water will be conducted four times each calendar year according to the requirements of the MSGP. Once each calendar year, in Q4 (October through December), a sample will be collected and analyzed for Total Suspended Solids in accordance with the requirements for dischargers into impaired waters without an established TMDL.

Routine facility inspections will be conducted in each calendar quarter by qualified personnel. At least one of these inspections will take place while stormwater is being discharged. Records will be maintained on site by the EHS Department. Any deficiencies in this storm water plan will be documented within 24 hours and corrective actions will be implemented within as soon as practicable, but not later than within 14 days of the inspection. In some cases, the repairs may take up to 45 days if EPA is notified
.
An Annual report will be submitted to EPA electronically for each Calendar year by January 30, of the following year.

A pollution prevention team with the appropriate authority has been designated to implement and maintain the storm water pollution prevention plan.

No benchmark monitoring is required for Axcelis' industry sector under the permit.

SECTION 2.0: GENERAL INFORMATION

SECTION 2.1: FACILITY PROFILE

Axcelis Technologies, Inc. (Axcelis) located in Beverly, Massachusetts produces manufacturing equipment for the semiconductor industry, namely ion implanters and related systems. Activities include receiving of equipment components, cleaning of the components and assembly in clean rooms. Following assembly, equipment is functionally tested, partially disassembled, cleaned and packaged for shipping. Other major activities include Product Development and equipment demonstrations and training for customers. The SIC Code for this facility is 3559 (Special Industry Machinery Not Elsewhere Classified).

This SWPPP lists the sources of pollutants that may enter storm water as a result of industrial activities at the Beverly facility. This plan identifies the control measures that have been and will be implemented to prevent storm water contamination from each of these sources.

Table 2.1 below provides general information on the Axcelis facility.

TABLE 2.1: STORM WATER POLLUTION PREVENTION PLAN

Emergency Contact: **Steven Roberge**	Work Phone: **(978) 787-9889** Mobile: **(978) 375-1207**
Title: Sr. Director, Environmental, Health & Safety	Emergency Phone: **(978) 375-1207**
Secondary Contact: **Hilary Matthews** (first alternate) EHS Manager	Work Phone: **(978) 787-9637** Mobile: **(781) 572-1295**
Secondary Contact: **Peter Jean** (second alternate) Sr. EHS / Facilities Technician	Work Phone**:** **(978) 787-9697** Emergency Phone: **(978) 810-5043**
Type of Facility: **This facility produces manufacturing machinery for the semiconductor industry.**	
Number of Employees: **Axcelis employs approximately 600 people in Beverly, MA (Feb. 2017).**	
Operating Schedule: **Approximately >80% of Axcelis employees work on the 1st shift, Monday through Friday. The remaining employees work other shifts. Security is on duty 24 hrs/day, 7 days/week.**	
Average Wastewater Discharge: **7,500 gallons per week.**	
NPDES Permit Number: **MAR050000** **(NPDES ID: MAR053136)**	

SECTION 2.2: ENVIRONMENTAL SETTING

Axcelis is located in the Beverly USGS topographic quadrangle. See Figure 1. The property is located in the Cherry Hill Industrial Park which is located between the Beverly Airport located to the north and Route 128 located to the south. Residential dwellings are located south of the property along Conant Street.

The property is located in the watershed to the Bass River. The Bass River is located east of the Property and flows from north to south passing beneath Conant Street. The river is located about 250 feet east of the facility's parking lot at its closest distance. The Axcelis Property line extends beyond the parking lot and includes wetland located adjacent to the Bass River. See Figure 2. The State of Massachusetts has split the Bass River into two segments 1) "Headwaters west of Wenham Lake, Beverly to the outlet of "Lower Shoe Pond" north of Route 62, Beverly" and 2) "Outlet of "Lower Shoe Pond" north of Route 62, Beverly to confluence with Danvers River, Beverley". Axcelis discharges to segment 1 which has been designated an impaired waterway by the State of Massachusetts with no Total Maximum Daily Limit (TMDL) established as of the 2012 report. The only pollution related impairment to this section is turbidity. This section of the Bass River is also impaired as a Fish Passage Barrier (a non-pollutant impairment).

According to the US Fish and Wildlife Service (FWS), there is one threatened species (Northern long-eared Bat Myotis septentrionalis). According US EPA Region 1, since there are no discharge-related activities planned at this facility (e.g., siting and construction of stormwater control structure), the northern long eared bat is not considered to be included within the facility's action area, making the facility eligible for MSGP coverage under Criterion A. The FWS Official Species list letter is retained in the EHS Shared Drive, Storm Water Folder.

Since the applicable portion of the Bass River is designated as impaired as a Fish Passage Barrier, there is no impact to aquatic species as designated by the National Marine Fisheries Service (NMFS).

According to inquiries made to the Beverly town offices, the Axcelis property is not located in an area designated for federal or state protection of historic places. A log on our inquiry is retained in the EHS Shared Drive, Storm Water Folder.

SECTION 3.0: SWPP TEAM

Overall responsibility for implementing, maintaining, updating and improving the SWPPP is with the Leader of the Storm Water Pollution Prevention Team (SWPP Team). SWPP Team members will assist the Leader in implementing, maintaining, and revising the SWPPP.

The SWPP Team shall consist of appropriate employees of Axcelis as listed on Table 3.1. Specific responsibilities of the SWPP Team Leader and members include:

- Identifying all hazardous substances at the facility.
- Identifying all potential storm water pollution sources.
- Establishing spill response and reporting procedures.
- Reviewing new construction and changes in processes relative to spill prevention and control.
- Reviewing spill incidents.
- Establishing an employee training program.
- Developing inspection and record keeping procedures.
- Conducting visual and impaired waters storm water monitoring.
- Participating in facility inspections.

Table 3.1: SWPP Team Roster

Leader: **Steve Roberge** Title: **Sr. Director, Environmental, Health & Safety**

Office Phone: **(978) 787-9889**

Responsibilities: Duly Authorized Representative of Certifier, Signatory authority on SWPPP and reports; coordinate all stages of plan development and implementation; coordinate employee training program; keep all records and ensure reports are submitted.

Members:

(1) Kevin Brewer Title: Executive Vice President and CFO
Office Phone: (978) 787-9551
Responsibilities: Corporate Officer, Certifier

(2) Hilary Matthews Title: EHS Manager
Office Phone: (978) 787-9637
Responsibilities: Alternate spill response coordinator and SWPPP trainer

(2) Peter Jean Title: Sr. EHS / Facilities Technician
Office Phone: (978) 787-9697
Responsibilities: Alternate spill response coordinator and spill team member

(4) Don Godfrey Title: Facilities Manager
Office Phone: (978) 787-9652
Responsibilities: Preventive maintenance and housekeeping

(5) Gary Tyacke Title: Facilities Supervisor
Office Phone: (978) 787-9898
Responsibilities: Preventive maintenance and housekeeping

(6) Security
Responsibility: Provide off-shift notification
Phone: (978) 787-9900

SECTION 4.0: SUMMARY OF POTENTIAL POLLUTION SOURCES

SECTION 4.1: DRAINAGE

Axcelis Technologies, Inc. is located at 108 Cherry Hill Drive in Beverly, Massachusetts. The facility at this location includes the main building, a smaller Storage Building, storage trailers, three wooden storage sheds, and large parking areas. The site map for the facility is provided as Figure 2.

The facility has two points of storm water discharge from the property. Both of these storm water discharge points enter the Beverly municipal separate storm water drainage system. One connection point is at Conant Street (Outfall #1) and the second point is at Cherry Hill Drive (Outfall #2).

All of the storm water associated with industrial activity drains into the storm sewer in Conant Street (Outfall #1). Therefore this is the only outfall monitored. The areas of industrial activity include the storage building where flammable and hazardous waste is stored, the shipping/receiving area, rooftop exhaust stacks, and an open area where unused and scrap material is stored on pallets and in dumpsters.

SECTION 4.2: POLLUTANTS

The inventory of materials that had potential exposure to storm water beginning 3 years prior to the date of this Storm Water Pollution Prevention Plan update is provided on Table 4.2-1. The table identifies the materials, their locations, the activities associated with their potential exposure (receiving, shipping, storage, etc.), the quantities exposed, and the current management practices used to minimize the storm water exposure.

Table 4.2-1

INVENTORY OF MATERIALS WITH POTENTIAL EXPOSURE TO STORM WATER

DESCRIPTION	LOCATION	POLLUTANTS	UNIT QUANTITIES	ACTIVITIES IN THE AREA	QUANTITY EXPOSED SINCE August 2007	COMMENTS/ CURRENT CONTROL MEASURES
Flammable Storage Area	Storage Building	Acetone, anhydrous alcohol, isopropanol phosphoric acid, waste pump oil, waste transformer oil (non-PCB), mixed xylenes	1 gallon plastic & glass containers, 55 gallon drums	Storage Transfer between Main Building and Flammable Storage Area	None None	Enclosed storage, secondary containment, spill response equipment, emergency spill response telephone number is posted, limited access, trained chemical handlers, 24 hr security.
Hazardous Waste Storage Area	Storage Building	Wastewater sludge (As, Cr, Cu, Pb, & Zn); Rags, gloves contaminated with As, Pb, and B; scrap machine parts, and scrap Lead	55 gallon drums, cubic yard containers	Storage Transfer between Main Building & Hazardous Waste Storage Area	None None	Outside storage under a canopy and on a secondary containment epoxy coated concrete pad within locked fenced area. Only solids are stored in this area. Emergency spill response telephone number posted, limited access, trained chemical handlers, 24 hr security, weekly inspections, and spill response equipment. Trained chemical handlers, transfer done only 1st shift when the Emergency Coordinator or alternate is on site.
Open Top Dumpsters	Shipping/Receiving Area	Wooden pallets, scrap wood, scrap steel	30 cubic yards	Temporary Storage	Not Significant	Dumpsters are to be covered each evening or when not in use. Good housekeeping
Breakaway Trash Compactor and Compactor Hydraulic Unit	Loading Docks near Shipping/Receiving Area	Non-hazardous solid waste; hydraulic oil in compactor	30 cubic yards solid waste. Greater than 10 gallons hydraulic oil	Solid waste management for off-site disposal	Not Significant	Good housekeeping for solid waste management and maintenance of hydraulic compactor; Level sensor interlock in hydraulic oil reservoir.
Empty Wooden Crates	Parking lot east of Main Facility	Wooden crates	Several	Temporary Storage	Not Significant	Storage inside is limited, so crates are periodically stored outside until crates are needed to ship product
Snow Removal Equipment Staging Area	Parking lot north of facility	Hydraulic Oil, Diesel fuel, sediment	Leaks, spills, snow melt from equipment	Seasonal Storage	Varying small quantities	Spill control equipment on hand during fueling; Storm Drain protector with additional oil pillow installed in affected drain

TABLE 4.2-1 (CONTINUED)

INVENTORY OF MATERIALS WITH POTENTIAL EXPOSURE TO STORM WATER

DESCRIPTION	LOCATION	MATERIALS	UNIT QUANTITIES	ACTIVITY	QUANTITY EXPOSED SINCE August 2012	COMMENTS/ CURRENT MANAGEMENT PRACTICES
Shipping/Receiving including enclosed loading docks and storage	Main Building	Various process chemicals Transformer oil, and Insta-Pak "A" & "B"	Various sizes (55 gallon drums and smaller containers) 55 gallon	Receiving Storage	Not Significant None	Trained chemical handlers, spill kits in adjacent area, emergency spill response telephone number posted Posted emergency spill telephone number, spill kits in adjacent area, and trained chemical handlers
Wastewater Treatment Plant/Deionized Water System	West of Main Facility	Wastewater, sodium hydroxide (50%), sulfuric acid (98%), ferric sulfate (10%), calcium chloride (10%), polymer solution, sodium chloride	(1) 2,200 gallon, (1) 1,000 gallon, (1) 750 gallon, 55 gallon, and 15 gallon	Wastewater Treatment	None	Batch pre-treatment for metal removal and neutralization. Management practices include secondary containment, trained personnel, emergency spill response telephone number is posted, spill kits, sump and pump to transfer any spills to wastewater treatment
Fire Pump House w/ Integrated Diesel Fuel Storage Tank	Between Main Facility and Storage Building	Diesel fuel	(1) 100 gallon	Fire fighting	None	Management practices include secondary containment, emergency spill response telephone number is posted
Emergency Generator	Northwest corner of Main Facility	Diesel fuel	(1) 250 gallon	Emergency Power	None	Management practices include secondary containment, emergency spill response telephone number is posted
Wooden Shed	Near northeast corner of Main Facility	Gasoline	(1) 5 gallon	Grounds Keeping	None	Good Housekeeping
Wooden Shed	Near northwest corner of Main Facility	Gasoline	(1) 5 gallon	Grounds Keeping	None	Good Housekeeping
Wooden Shed	West side – near Main Entrance	Gasoline	(1) 5 gallon	Grounds Keeping	None	Good Housekeeping
Kitchen Grease Collection pail (use discontinued January 2014)	Next to trash compactor	Grease	(1) 30 gallon	Waste kitchen grease	Not significant	Good Housekeeping; Enclosure box secured to facility structure to prevent tipping
Bead Blast Vents	On roof	Bead blast	n/a	Particulates vented from Bead Blast operation	Not significant	Good Housekeeping; HEPA filter on Repair Shop exhaust discharge; Quarterly Inspection of static pressure on inlet and outlet; change filters as needed

SECTION 4.3: SIGNIFICANT SPILLS AND LEAKS

Significant spills and leaks which occurred at the facility since August 2012 are listed on Table 4.3.1 on the following page.

Table 4.3-1

LIST OF SIGNIFICANT SPILLS AND LEAKS

Below are all significant spills and significant leaks of pollutants that have occurred since August 2012 in areas exposed to precipitation or otherwise drain to a storm water conveyance.

Date	Spill	Leak	Location	Description				Response Procedures		Comments
				Type of Material	Quantity	Source	Reason	Amount of Material Recovered	Material No Longer Exposed to Storm Water	
Aug 2012	Yes	No	Parking Lot, near N2 tank	Hydraulic Oil	7 Gals	Airgas Delivery Truck	Ruptured hose	Complete	Yes	
Apr. 2013	Yes	No	ATC Fan Deck	Latex concentrate	5 gals	Ruptured pail	Ruptured pail	~ 3.5 gals ~70%	Yes	Portion lost to drain

SECTION 4.4: NON-STORM WATER DISCHARGES

The facility was evaluated for the presence of discharges other than storm water (a.k.a. non-storm water discharges) on December 17, 2008. Outfalls #1 and #2 were evaluated by reviewing current building drawings showing storm water and wastewater plumbing designs. HVAC condensate was the only allowable non-stormwater source identified (Part 1.1.3). No other non-storm water sources were identified. The condensate discharge is of low volume and has no pollutants, therefore, no control measures were deemed necessary.

SECTION 4.5: SALT STORAGE

No storage piles containing salt are located at the Axcelis facility.

SECTION 4.6: SAMPLING DATA

Storm water sampling with laboratory analysis was not previously required for this facility because of its industrial activity as a condition of the prior MSGP.

Quarterly visual monitoring of storm water runoff from the Axcelis facility is required and specified in Part 3.2 of the Permit. Monitoring at Outfall #2 is not required because no discharges into catch basins draining to Oufall #2 are associated with industrial activity. Specifically, no industrial activity is conducted in the drainage area to these catch basins and no roof conductors divert flow to this drainage basin.

Axcelis must perform and document a quarterly visual examination of storm water discharge from Outfall #1. The examination should be collected within the first 30 minutes if possible (or as soon thereafter as practical) of when the runoff, or snowmelt, is discharging from the Axcelis facility. If the sample is collected after the first 30 minutes of a storm discharge, Axcelis must document why it was not possible to take samples within the first 30 minutes. At least one sample must capture snowmelt discharge.

A sample of the discharge must be collected each quarter of the year. Sample collection does not have to be made in the middle of a quarter and may be performed at a time (i.e. early or late in the quarter) to take advantage of active precipitation periods specific to Axcelis' geographic location. This must be documented and maintained with the monitoring records that are kept with this plan.

If no qualifying storm event occurs that results in storm water runoff during a particular season (quarter), a sampling form must be completed to document this fact. The sampling form must be signed by duly authorized representative of Axcelis.

The samples to be examined must be collected from the storm water discharge resulting from a storm event resulting in measurable discharge and that occurs at least 72 hours after the previous measurable storm event. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen and other obvious indicators of storm water pollution. Where practicable, the same designated individual(s) should

carry out the collection and examination of the discharges for the entire permit term. A quarterly storm water discharge examination form is provided as Appendix A.

Once each calendar year, in Q4 (October through December), a sample will be collected and analyzed for Total Suspended Solids in accordance with the requirements for dischargers into impaired waters without an established TMDL.

During the previous permit term, samples collected during quarterly visual assessments did not show evidence of storm water pollution. Samples were examined for color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen and other obvious indicators of storm water pollution. Documentation can be found in the Axcelis EHS Shared Drive, Storm Water folder.

SECTION 4.7: RISK IDENTIFICATION AND SUMMARY OF POTENTIAL POLLUTANT SOURCES

The areas described in Table 4.2-1 were identified as potential pollutant sources which require the implementation of control measures. The potential risks or deficiencies at the locations are described below.

ACTIVITY	*DESCRIPTION*
Transfer	Periodically chemicals and hazardous wastes are transferred to the **flammable storage area** and the **hazardous waste storage area**. There is a potential for exposure to rainfall during transfer. Pollutants could drain towards the storm water catch basin about 120 ft. east of shipping/receiving. This risk is reduced by avoiding, where feasible, transfer of hazardous substances during inclement weather.
Storage	Chemicals and hazardous wastes stored in the **flammable storage area** and **hazardous waste storage area** are exposed to rain and snow. Water which collects in the storage area may contain trace amounts of contaminants. Pumping the collected water to the adjacent parking area could result in pollutants entering storm water catch basins. Risks are minimized by the secondary containment system. Risks have been further minimized by the installation of slats on the fence to block entry of precipitation to the area.
Storage	If the **trash compactor** hydraulic unit leaks, the oil will drain outside the building, onto the concrete pad, and across the paving to the storm drain. Axcelis has modified a nearby roof leader so the compactor is not subject to storm water discharges from this outfall. The compactor is subject to routine maintenance by JRM Hauling and Recycling who owns the unit.
Transfer	Materials used by Axcelis are potentially exposed to storm water during loading and unloading of materials at the **shipping/receiving loading docks**. A spill or release of materials at the loading docks could result in pollutants entering storm water catch basins.
Storage	Throughout the Axcelis facility, trash and recyclables collection containers were noted. Several collection containers were noted in the **outdoor scrap materials/recycling storage area**. Accumulated precipitation which was in contact with stored materials could result in pollutants entering storm water catch basins. The risks associated with the collection containers will be reduced by covering the containers, at the end of each shift and when precipitation is occurring or anticipated.
Storage and Delivery	There are two locations on the site where diesel fuel is delivered and stored: the facility **emergency generator** and the **fire pump**. Each unit has an integrated diesel fuel storage tank. Both diesel fuel tanks have secondary containment and the exterior fill pipes are equipped with a spill containment box.

SECTION 5.0: DESCRIPTION OF CONTROL MEASURES

SECTION 5.1: SUMMARY OF POTENTIAL POLLUTANT SOURCES AND CONTROL MEASURES

Table 5.1-1 summarizes the control measures that will minimize the potential of storm water pollution from the locations described in Section 4.7. A detailed description of how control measures are implemented is contained in Section 5.2 below.

Table 5.1-1

STORM WATER POLLUTANT SOURCES	EXISTING CONTROL MEASURES
Flammable Storage Area	• Institute Good Housekeeping practices • Maintain secondary containment • Slats in fence reduce entry of precipitation to area • Train chemical handlers • Post emergency spill response telephone • Spill kits • Limited access • 24 hour security • Chemicals transferred only during 1st shift when Emergency Coordinator or the alternate is on site
Hazardous Waste Storage Area	• Institute Good Housekeeping practices • Limited to solid wastes (no liquids) • Conduct weekly inspections (includes checking and pumping down of sump, after visual confirmation of no leaks) • Slats in fence reduce entry of precipitation to area • Train chemical handlers • Post emergency spill response telephone numbers • Spill kits w/ “plug rugs” to cover catch basins in the event of a spill • Limit access • Provide 24 hour security • Transfer hazardous wastes only during 1st shift when Emergency Coordinator or the alternate is on site.
Trash Compactor	• Institute Good Housekeeping practices • Modified nearby roof leader to minimize storm water exposure • Inspection and maintenance by owner of unit, JRM Hauling and Recycling • Hydraulic oil reservoir equipped with a level sensor interlock
Outdoor Scrap yard/Recycling Storage Area	• Institute Good Housekeeping Practices • Containers are covered by the end of each shift and when precipitation is occurring or anticipated. • Conduct inspections • Supervise materials pickups
Shipping/Receiving	• Post emergency spill response telephone numbers • Spill kits in adjacent area • Train chemical handlers • Spill kits w/ “plug rugs” to cover catch basins in the event of a spill
Diesel Fuel Delivery at Fire Pump house and Emergency Generator	• Post emergency spill response telephone numbers • Spill kits w/ “plug rugs” to cover catch basins in the event of a spill • Train chemical handlers
Used Cooking Oil Accumulation	• Drum maintained within weather protective enclosure • Attach weather enclosure to building to prevent toppling

SECTION 5.2: CONTROL MEASURES TO MEET TECHNOLOGY-BASED LIMITS

Below are the control measures that have been implemented at the Beverly facility.

Minimize Exposure

Exposure of manufacturing, processing and material storage areas from precipitation and runoff are minimized by the following:

- ✓ Flammable materials, hazardous waste, wastewater treatment plant supplies, and diesel fuel storage associated with the fire pump house and the emergency generator are all stored using secondary containment.
- ✓ Used cooking oil is accumulated in a weather protective enclosure attached to the building to prevent toppling during severe weather
- ✓ Spills and leaks are cleaned up promptly using dry methods to prevent the discharge of pollutants.
- ✓ All cleaning operations are performed indoors.
- ✓ All wash water drains to the municipal sewer.

Good Housekeeping

Axcelis follows good housekeeping practices to maintain a clean and orderly work environment. Housekeeping efforts practiced by Axcelis personnel include:

- ✓ Maintain dry and clean floors and ground surfaces by using brooms, shovels, vacuum cleaners, or cleaning machines.
- ✓ Regularly pickup and dispose of garbage and waste material.
- ✓ Make sure equipment is working properly.
- ✓ Routinely inspect for leaks or conditions that could lead to discharges of chemicals or contamination of storm water with raw materials, intermediate materials, waste materials, or products.
- ✓ Maintain material and chemical storage areas in a clean and orderly manner.
- ✓ Keep doorways, aisles, and passageways clean and in good repair with sufficient safe turning and maneuvering space for materials handling equipment.
- ✓ Provide adequate aisle space to facilitate material transfer and easy access for inspections.
- ✓ Incorporate information sessions on good housekeeping practices into the Axcelis employee training program. Ensure spill response procedures are understood by employees.
- ✓ Avoid, where feasible, transferring hazardous substances in inclement weather.

Preventive Maintenance

The preventive maintenance program in place at Axcelis includes the following elements:

- ✓ Identification of equipment, systems, and facility areas that require inspection.

- ✓ Routinely examine equipment and containers for leaks, corrosion, and support or foundation failure. Maintain complete records of inspections.
- ✓ Performing inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, and plant equipment and systems that could fail and result in contamination of stormwater.
- ✓ Promptly adjust, repair or replace defective equipment or failing containers found during inspections. Maintain an inventory of spare parts for equipment that needs frequent repair.
- ✓ Inspect Refurb HEPA Filter at least quarterly to ensure static pressure at inlet and outlet are within operational norms. Replace filters when need using secondary containment enclosure to prevent loss of solids.
- ✓ Clean catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth and keeping the debris surface at least six inches below the lowest outlet pipe.

Spill Prevention

Operator error and/or equipment failure that lead to container overfill or rupture during material handling Spill prevention efforts will include:

- ✓ Implementing, maintaining and updating this SWPPP annually. Or sooner, if significant facility or process changes occur that could impact storm water.
- ✓ Establishing spill response and reporting procedures and train employees who may cause, detect, or respond to a spill.
- ✓ Developing material handling procedures and storage requirements, including procedures for labeling containers that could be susceptible to spillage. (e.g., “Used Oil,” “Spent Solvents,”) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- ✓ Encouraging employees to recycle, reclaim and/or reuse process materials to reduce the volume of new material imported to the facility.
- ✓ Conducting preventive maintenance on equipment used to receive, load, unload, transfer, and store materials.
- ✓ Training employees on the proper use of material handling equipment.
- ✓ Ensuring suppliers are aware of proper loading/unloading procedures specific to the Axcelis facility.
- ✓ Reviewing new construction or changes in processes and procedures relative to spill prevention and control.
- ✓ Utilizing secondary containment where practicable.
- ✓ Separating material storage areas from traffic areas with physical barriers where feasible.

Spill Response Procedures

The SWPP Team Leader is responsible to implement spill response operations in the event of a release which threatens to negatively impact storm water. The SWPP Team Leader is a designated member of management familiar with materials used through the Axcelis facility. The members of the SWPP Team will assist the SWPP Team Leader with spill response actions.

In the event of a spill or release which threatens to pollute storm water, the SWPP Team Leader will:

- ✓ Establish on-scene authority, unless the local fire department is on-site to establish such authority.
- ✓ Assess the spill to identify the type and magnitude of materials involved.
- ✓ Notify appropriate local, state, and federal authorities by phone and submit release reports as required by law.
    - The Massachusetts Department of Environmental Protection must be notified within 2-hours after obtaining knowledge of a release that either exceeds its Reportable Quantity or results in the appearance of a sheen on surface water. Call the 24-hour state-wide hotline at (888) 304-1133.
    - The United States Environmental Protection Agency must be notified immediately (generally within 15-minutes) from when the release occurred. For releases that exceed a CERCLA-listed Reportable Quantity, call the National Response Center at (800) 424-8802.
    - Call 911 for releases that threaten public safety.
- ✓ Notify appropriate Axcelis contractors that may include:
    - Enpro at (800) 966-1102, an environmental clean-up contractor.
    - Triumvirate Environmental at (800) 966-9282, an environmental clean-up contractor.
    - SAK Environmental, LLC at (978) 688-7804 (office) and (978) 835-4704 (cell) for Licensed Site Professional services.
- ✓ Determine if the facility's evacuation plan should be initiated.
- ✓ Determine if the assistance of outside contractor(s) is required to ensure proper cleanup and removal of spilled materials.
- ✓ Designate and properly train responsible individuals to contain and cleanup the release.
- ✓ Direct the containment and cleanup operations.
- ✓ Conduct a post-spill evaluation of the effectiveness of the spill response procedures.

Sediment and Erosion Control

Sediment and erosion have been controlled by either paving the open areas or planting grass, trees, and shrubs.

Management of Runoff

Runoff is diverted from industrial activities where possible by the use of protective roofs and coverings and berms. Structural measures such as detention basins or oil/water separators are not considered necessary at this time.

Salt Storage Piles

No salt storage piles are located at the Axcelis facility.

Sector Specific Non-Numeric Effluent Limits

No additional non-numeric effluent limits apply to Axcelis' industry sector (AB – Transportation, Equipment, Industrial or Commercial Machinery Facilities).

Employee Training

Employee training informs personnel at all levels of responsibility of the components and goals of the Storm Water Pollution Prevention Plan. The training will inform Axcelis employees of the components and goals of your SWPPP and addresses spill prevention and response, good housekeeping, and material management practices.

The spill prevention and response component imparts training to the employees in the following measures:

1. Identifying potential spill areas and drainage routes, including information on past spills and causes.
2. Reporting spills to appropriate individuals, without penalty.
3. Specifying material handling procedures and storage requirements.
4. Implementing spill response procedures.

Employee training will be required annually for all employees who work in areas where industrial materials or activities are exposed to storm water, and for employees who are responsible for implementing activities identified in the SWPPP. Annual training is required for all employees engaged in activities that create potential sources of storm water pollution such as shipping/receiving and hazardous waste and flammable materials management.

Members of the SWPPP team will additionally be trained in the following:

- ✓ The location of all controls on the site required by this permit, and how they are to be maintained;
- ✓ The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- ✓ When and how to conduct inspections, record applicable findings, and take corrective actions.

A record of each employee training session shall be maintained by the EHS Department in the UL Puresafety Learning Management System. The record shall include dates, personnel attending, subject matter, and the lesson plan used in the training session.

Non-Storm Water Discharges

The facility was evaluated for the presence of discharges other than storm water (a.k.a. non-storm water discharges) on December 17, 2008. Outfalls #1 and #2 were evaluated by reviewing current building drawings showing storm water and wastewater plumbing designs. HVAC condensate was the only allowable non-stormwater source identified (Part 1.1.3). No

other non-storm water sources were identified. Because condensate discharge is of low volume and has no pollutants, no control measures were deemed necessary.

Waste, Garbage and Floatable Debris

Storm water discharge areas are free of waste, garbage and floatable debris. All solid waste is properly disposed in containers and transported off-site.

Dust Generation and Vehicle Tracking of Industrial Materials

No dust generation occurs at the facility. Industrial materials are contained in trucks which are driven over paved surfaces.

SECTION 5.3: CONTROL MEASURES TO MEET WATER QUALITY-BASED EFFLUENT LIMITS

Water Quality Standards

There are no water quality based effluent limits for Axcelis' industrial activities under this Permit. Therefore, no additional control measures beyond those outlined for technology based limits are deemed necessary.

There is no evidence that discharges from Axcelis caused or contributed to an exceedance of surface water quality standards by the EPA or any other regulatory agency. Therefore, Axcelis is not subject to additional water quality-based limits.

Discharges to Water Quality Impaired Waters

The Bass River Segment 1 has been designated an impaired waterway by the State of Massachusetts with no Total Maximum Daily Limit (TMDL) established as of the 2012 report. The only pollution related impairment to this section is turbidity.

Requirements Relating to Endangered Species and Historic Properties

Axcelis' action area is not located in an area designated for the protection of endangered species other than the Northern long-eared Bat. According US EPA Region 1, since there are no discharge-related activities planned at this facility (e.g., siting and construction of stormwater control structure), the northern long eared bat is not considered to be included within the facility's action area, making the facility eligible for MSGP coverage under Criterion A.

According to inquiries made to the Beverly town offices, the Axcelis property is not located in an area designated for federal or state protection of historic places.

No additional control measures beyond those outlined for technology based limits are deemed necessary.

SECTION 6.1: PERTAINING TO CONTROL MEASURES

Good Housekeeping

- ✓ Covering containers at the end of each shift and when precipitation is anticipated;
- ✓ Inspecting drums and other containers – as work is performed.
- ✓ Hazardous waste pick up - less than every 90 days as a good management practice
- ✓ Solid waste pick up - approximately twice per week by Janitorial Contractor (DTZ),
- ✓ Kitchen grease pick up - approximately every 90 days by Kitchen contractor (Sodhexo)

Maintenance

- ✓ Trash compacter - JRM Hauling and Recycling maintains equipment in accordance with their program.
- ✓ Bead blast filters on roof - Visually inspected quarterly by Axcelis for pressure differential at the inlet and outlet.

Spill Prevention and Response Procedures

- ✓ Update after a release occurs.

Employee Training

- ✓ Train annually in fourth quarter (Oct.- Dec.) of each year.

SECTION 6.2: PERTAINING TO MONITORING, INSPECTION AND ANNUAL REPORTS

Benchmark Monitoring

Benchmark monitoring is not required for Axcelis' industry sector under the Permit.

Effluent Limitations Guidelines Monitoring

No effluent limitation monitoring is required by Axcelis under the Permit.

State- or Tribal-Specific Monitoring

State - or tribal-specific monitoring is not required by Axcelis.

Impaired Waters Monitoring

Impaired Waters monitoring is required for once per year for Total Suspended Solids (TSS) in Q4 of each year under the permit.

Other Monitoring as Required by EPA

No other monitoring is required by Axcelis under the Permit.

Routine Facility Inspections Four times each year (i.e. one inspection each quarter).

During normal facility operating hours, inspections must be conducted of areas of the facility covered by the requirements in this permit, including, but not limited to, the following:

- ✓ Performed by qualified Axcelis personnel, or a subcontractor.
- ✓ Inspect all areas of the facility where industrial materials or activities are exposed to storm water.
- ✓ Control measures used to comply with the effluent limits contained in this permit;
- ✓ Areas where spills and leaks have occurred in the past three years;
- ✓ Discharge points; and
- ✓ Documentation of findings.
- ✓ Correct deficiencies immediately, when feasible, or within 14-days of discovery. In some cases, the repairs may take up to 45 days. If the completion of stormwater control repairs/replacement will exceed the 45 day timeframe, notify the EPA Regional Office of your intention to exceed 45 days, and document in your SWPPP your rationale for your modified maintenance timeframe.
- ✓ Update SWPPP within 24 hours after correcting deficiencies.

At least once each calendar year, the routine inspection must be conducted during a period when a stormwater discharge is occurring.

Inspections must be performed by qualified personnel with at least one member of the SWPPP team participating. Inspectors must consider the results of visual and analytical monitoring (if any) for the past year when planning and conducting inspections.

Areas to inspect include equipment with spill potential, areas where spills and leaks have occurred in the past, material storage tanks, outdoor material processing areas, material handling areas, shipping/receiving, flammable storage area, scrap yard and recycling storage area, trash compactor, fire pump and diesel tank, Rooftops, particularly near bead blast filter system and exhaust, and the hazardous waste storage area.

All inspections must be documented. Inspection records will identify

- ✓ The inspection date and time;
- ✓ The name(s) and signature(s) of the inspector(s);
- ✓ Weather information;
- ✓ All observations relating to the implementation of control measures at the facility, including:
- ✓ A description of any discharges occurring at the time of the inspection;
- ✓ Any previously unidentified discharges from and/or pollutants at the site;
- ✓ Any evidence of, or the potential for, pollutants entering the drainage system;

- ✓ Observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water;
- ✓ Any control measures needing maintenance, repairs, or replacement;
- ✓ Any additional control measures needed to comply with the permit requirements;
- ✓ Any incidents of noncompliance; and
- ✓ A signed, certification statement

Identified deficiencies must be corrected as soon as practicable, but not later than within 14 days of the inspection. In some cases, the repairs may take up to 45 days. If the completion of stormwater control repairs/replacement will exceed the 45 day timeframe, notify the EPA Regional Office of the intention to exceed 45 days, and document in the SWPPP the rationale for the modified maintenance timeframe. The SWPPP should be revised within 24 hours of completion of the corrective action.

A sample inspection form is provided in Appendix B.

Quarterly Visual Assessment of Storm Water Discharges

- ✓ Four times each year (i.e. one sample each quarter) from Outfall #1. One sample must capture snowmelt discharge.
- ✓ Collect sample within the first 30 minutes (or as soon thereafter as practical). In the case of snowmelt, samples must be taken during a period with a measurable discharge from your site;
- ✓ Collect the sample in a clean, colorless glass or plastic container, and examine it in a well-lit area;
- ✓ The discharge, must occur at least 72 hours after the previously measurable storm event.
- ✓ Document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen and other obvious indicators of storm water pollution.
- ✓ Whenever the visual assessment shows evidence of stormwater pollution, initiate corrective action

If the sample is collected after the first 30 minutes of discharge, Axcelis must document why it was not possible to take samples within the first 30 minutes.

If no qualifying storm event occurs that results in storm water runoff during a particular season (quarter), a quarterly storm water discharge examination form must be completed to document this fact. The quarterly storm water discharge examination form must be signed by duly authorized representative of Axcelis.

Where practicable, the same designated individual(s) should carry out the collection and examination of the discharges for the entire permit term. A quarterly storm water discharge examination form is provided as Appendix A.

Monitoring at Outfall #2 is not required because no industrial discharges are located in this drainage area.

Impaired Waters Monitoring

Once each calendar year, in Q4 (October through December), a sample will be collected and analyzed for Total Suspended Solids in accordance with the requirements for dischargers into impaired waters without an established TMDL.

All monitoring data collected pursuant to Impaired Waters Monitoring must be submitted to EPA using EPA's NetDMR system (available at www.epa.gov/netdmr).

Corrective Action

Whenever any of the following occur, Corrective action must be undertaken:

- ✓ An unauthorized release or discharge occurs at the facility.
- ✓ Control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in this permit.
- ✓ A required control measure was never installed, was installed incorrectly, or is not being properly operated or maintained.
- ✓ Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam)

If any of the following conditions occur, the SWPPP must be reviewed to determine if modifications are necessary to meet the effluent limits in this permit:

- ✓ Construction or a change in design, operation, or maintenance at your facility that significantly changes the nature of pollutants discharged in stormwater from your facility, or significantly increases the quantity of pollutants discharged.

Corrective Action Documentation.
Document the existence of any of the conditions requiring corrective action within 24 hours of becoming aware of such condition. Include the following information in your documentation:

- ✓ Description of the condition triggering the need for corrective action
- ✓ Date the condition was identified;
- ✓ Description of immediate actions taken to minimize or prevent the discharge of pollutants. For any spills or leaks, include response actions, the date/time clean-up completed, notifications made, and staff involved. Also include any measures taken to prevent the reoccurrence of such releases; and
- ✓ A signed, certification statement

Annual Report

The Annual Report must be submitted to EPA electronically using EPA's NeT system, by January 30th for each year.

To access NeT, go to http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.cfm.

This Report must include:

- ✓ A summary of the past year's routine facility inspection documentation
- ✓ A summary of the past year's quarterly visual assessment documentation
- ✓ A summary of the past year's corrective action documentation
- ✓ A signed certification statement

SECTION 7.0 Records

In addition to this SWPPP, the following records will be maintained in the EHS Shared Drive, Storm Water folder, complete and up-to-date, to demonstrate full compliance with the conditions of the 2015 MSGP:

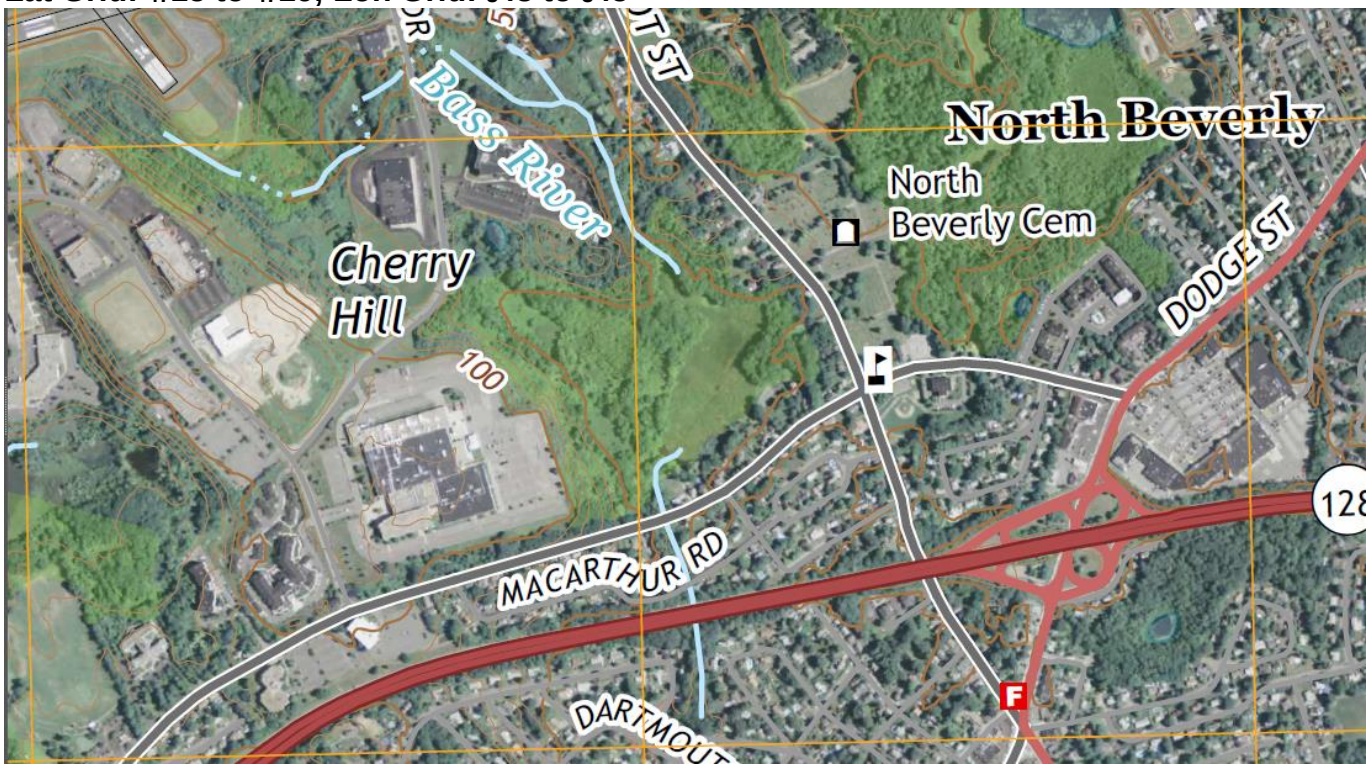
- ✓ A copy of the NOI submitted to EPA along with any correspondence exchanged between Axcelis and EPA specific to coverage under this permit;
- ✓ A copy of the acknowledgment received from the EPA assigning Axcelis' NPDES ID;
- ✓ A copy of the 2015 MSGP (in electronic format);
- ✓ Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part 2.1.2.3);
- ✓ All inspection reports, including the Routine Facility Inspection Reports (see Part 3.1.2) and Quarterly Visual Assessment Reports (see Part 3.2.2);
- ✓ Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of a measurable storm event) (see Parts 3.2.3 and 6.1.5);
- ✓ Corrective action documentation required per Part 4.4;
- ✓ Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if you discharge directly to impaired waters, and that such pollutants were not detected in your discharge or were solely attributable to natural background sources (see Part 6.2.4.1);

The following information will be maintained at the following URL: http://www.axcelis.com/about-us/swppp

- ✓ The Current SWPPP
- ✓ Copy of Notice of Intent (NOI)
- ✓ Letter from EPA acknowledging receipt of NOI
- ✓ Figures 1 and 2
- ✓ Endangered Species and Historical Sites information
- ✓ Annual TSS Results for Impaired Waters

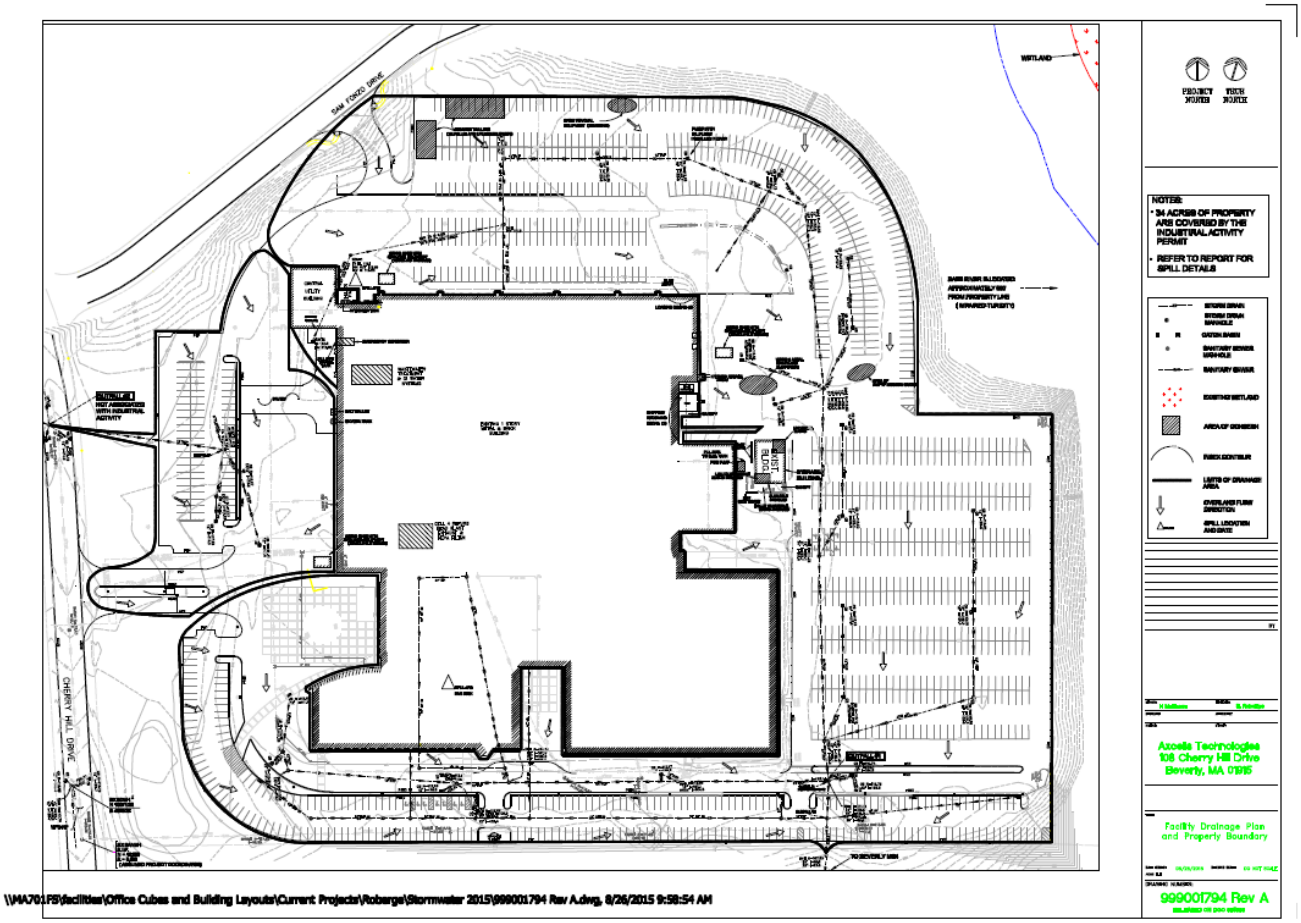
FIGURES
FIGURE 1 SITE LOCATION MAP
Excerpts from USGS Salem MA Quadrangle Grid 19T: Satellite Imagery

Lat Grid: $_{47}15$ to $_{47}16$; Lon Grid: $_{3}43$ to $_{3}45$



Full USGS Map in Appendix E, Document 999001795

FIGURE 2: FACILITY DRAINAGE PLAN AND PROPERTY BOUNDARY
Document 999001794



STORMWATER POLLUTION PREVENTION PLAN
APPENDIX A:
STORM WATER EXAMINATION REPORT FORM

QUARTERLY STORM WATER EXAMINATION INSPECTION FORM, STORM WATER POLLUTION PREVENTION		
Observations		**Outfall #1, Discharge to Conant Street**
Nature of runoff (e.g., runoff, snowmelt)		
Color		
Odor		
Clarity		
Floating solids present? (If present, describe color, particle size, etc.)		
Settled solids present? (If present, describe color, particle size, etc.)		
Foam present? (If present, describe relative quantity, color, etc.)		
Oil Sheen Present?		
Other qualities?		
Suspended solids (If present, describe color, particle size, etc.)		
Probable sources of contamination, if any (e.g., parking lot runoff, lawn maintenance chemicals, etc.)		

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 submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date Signed: _____

Examination Date: Examination Time:

Weather Conditions:

Name & Title of the Inspector: Work Telephone Number:

APPENDIX B:
FACILITY INSPECTION REPORT FORM

ROUTINE FACILITY INSPECTION FORM, STORM WATER POLLUTION PREVENTION				
LOCATION	**STATUS OF CONTROL MEASURES** (Enclosure, secondary containment, spill response equipment, emergency numbers posting, etc.)	**IDENTIFIED DEFICIENCIES**	**CORRECTIVE ACTION (S), DATE COMPLETED**	**COMMENTS**
Flammables Storage Area				
Hazardous Waste Storage Area				
Open Top Dumpster(s)				
Trash Compactor/Hydraulic Unit				
Empty Wood Crates				
Shipping/Receiving				
Wastewater Treatment Plant/Deionized Water System				
Facility Emer. Gen./Diesel Tank				
Fire Pump Emer. Gen./Diesel Tank				
Bead Blast HEPA Filter				
Storm Collection Drains				
Outfall 1				
Other Areas (Snow removal equipment storage)				
Other Areas (Stone / paver storage)				
Other Areas (Roof)				
Other Areas (Kitchen grease drum)				
Weather Conditions:				
Date of Inspection:			Time of Inspection:	
Name & Title of Inspector:			Work Telephone No:	

Additional Inspectors:

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 submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Date Signed:

APPENDIX C:
COPY OF MSGP-2015

(NOT INCLUDED - SEE Storm Water Folder / EHS Electronic records)

APPENDIX D:
FACILITY CONTINGENCY PLAN – DOCUMENT #9900290

(NOT INCLUDED - SEE Storm Water Folder / EHS Electronic records / SmarTeam Document)

APPENDIX E:
Full USGS Salem Quadrangle Map #999001795

(NOT INCLUDED - SEE Storm Water Folder / EHS Electronic records / SmarTeam Document)