STORMWATER POLLUTION PREVENTION PLAN

HOWARD COUNTY
LITTLE PATUXENT WATER RECLAMATION PLANT
SAVAGE, MARYLAND

Prepared for:

Howard County Department of Public Works
Bureau of Environmental Services
6751 Columbia Gateway Drive, Suite 514
Columbia, Maryland 21046

Prepared by:

EA Engineering, Science, and Technology, Inc.
225 Schilling Circle, Suite 400
Hunt Valley, Maryland 21031

JUNE 2014

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Accepted and Approved By:

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Bureau of Utilities — Date: 6/26/14

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Bureau of Facilities — Date: 6/26/14

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LIST OF ACRONYMS AND ABBREVIATIONS

AST	Aboveground Storage Tank
BES	Bureau of Environmental Services
BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response, Compensation, & Liability Act
CFR	Code of Federal Regulations
COMAR	Code of Maryland Regulations
CSCE	Comprehensive Site Compliance Evaluation
DMR	Discharge Monitoring Report
DNR	Department of Natural Resources
DOT	Department of Transportation
DPW	Department of Public Works
HAZCOM	Hazard Communication
LPWRP	Little Patuxent Water Reclamation Plant
MDE	Maryland Department of the Environment
MEMA	Maryland Emergency Management Agency
MS4	Municipal Separate Storm Sewer System
MSP	Maryland State Police
NaOH	Sodium Hydroxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRC	National Response Center
P2	Pollution Prevention
RCRA	Resource Conservation and Recovery Act
SMD	Stormwater Management Division
SOP	Standard Operating Procedure
SPCC	Spill Pollution, Control, and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
USEPA	U.S. Environmental Protection Agency

CERTIFICATION

The following certification statement must be signed and dated by an individual who meets the requirements of Part II.C, of the 12-SW. This certification must be re-signed in the event of a SWPPP modification in response to a trigger for corrective action.

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.

Mark DeLuca, P.E.
Deputy Director, Howard County Department of Public Works
Chief, Howard County Bureau of Environmental Sciences

6/26/14
Date

1.0 INTRODUCTION

1.1 BACKGROUND

This Stormwater Pollution Prevention Plan (SWPPP) is for the Little Patuxent Water Reclamation Plant (LPWRP), which is owned and operated by Howard County. The SWPPP was developed in order to comply with the 1990 amendments to the Clean Water Act that established the National Pollutant Discharge Elimination System (NPDES) permitting system. In addition, development of this SWPPP complies with the Maryland Department of the Environment (MDE) General Discharge Permit 12-SW (henceforth referred to as the 12-SW), which authorizes the discharge of stormwater associated with industrial activity to waters of the State of Maryland. A copy of the 12-SW permit is located in Appendix B.

The purpose of a SWPPP is to identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the site. It also serves as a framework for pollution prevention activities and a guidance document for implementing Best Management Practices (BMPs) to minimize stormwater pollution.

This SWPPP has been prepared following MDE and U.S. Environmental Protection Agency (USEPA) guidelines:

- *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (USEPA 832-R-92-006, September 1992) http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000469L.txt

- USEPA Summary Guidance for the preceding document (USEPA 833-R-92-002, October 1992) http://www.kdheks.gov/stormwater/download/developing_industrial_swp2_plans_summary.pdf

- *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators* (USEPA 833-B-09-002, February 2009) http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf

- Chesapeake Bay Restoration Guidance http://www.mde.state.md.us/programs/Permits/WaterManagementPermits/WaterDischargePermitApplications/Pages/ChesapeakeBayRestorationGuidance.aspx

Additional data and information has been used from the most recent revisions to the 2000 Maryland Stormwater Design Manual, Volume I & II (May 2009), which includes significant details on BMPs and the stormwater requirements from MDE.

1.2 PERMIT REQUIREMENTS

LPWRP submitted a Notice of Intent (NOI) to MDE in June 2014 (Appendix A) to obtain coverage under MDE's General Permit No. 12-SW for Stormwater Discharges associated with Industrial Facilities (12-SW) (Appendix B).

Part III.C of the 12-SW requires the development and implementation of a SWPPP. The SWPPP must address potential pollution sources of stormwater, and the control measures to prevent pollution to the receiving water body. This SWPPP addresses the requirements set forth in the 12-SW for each of the drainage areas at the site.

1.3 DISTRIBUTION

The SWPPP will be distributed to Howard County Department of Public Works (DPW) Bureau of Environmental Services (BES) and each member of the Pollution Prevention (P2) Team, as described in Section 2.0. Updates to the SWPPP will also be distributed to each team member as they are prescribed and will be made available online at http://howardcountymd.gov/BES.htm.

1.4 MODIFICATIONS TO THE SWPPP

The SWPPP should be modified whenever necessary to address "triggering conditions" as defined in the 12-SW. This SWPPP is to be amended when the following triggering conditions occurs:

- A significant change in design, construction, operation, or maintenance at LPWRP that creates a potential for the discharge of pollutants to the waters of the State of Maryland;
- If this SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with industrial activity at LPWRP; and/or
- In response to corrective actions.

Following amendment of the SWPPP, the certification statement will be re-signed in accordance with 12-SW Signatory Requirements for modifications which are in response to corrective actions. The Corrective Action Procedure is defined in Section 7.2.

For SWPPP modifications, the following table will be maintained to log the description of the modification, the name of the person making it, and the date and signature of that person.

Table 1-1. SWPPP Modification Log

Description of Modification	Signature of SWPPP Modifier	Date
Revision 00; Original SWPPP		1994
Revision 01; Updated SWPPP		April 1999
Revision 02; Updated SWPPP		2001
Revision 03; Updated SWPPP		2002
Revision 04; Updated SWPPP		February 2010
Revision 05; Updated Contacts		April 2013
Revision 06; Update of SWPPP dated June 2014 to reflect the MDE 12-SW General Permit and Sector Specific requirements.		June 2014

2.0 LPWRP CONTACT INFORMATION

Howard County DPW owns and operates the Little Patuxent Water Reclamation Plant. Contact information for facility operators, owners, and 24-hour emergency contacts are identified in the table located in the front of this document. Contact information for federal, state, and local government agencies that require notification or may provide assistance in the event of a spill are also located in the table.

2.1 STORMWATER POLLUTION PREVENTION TEAM

LPWRP has created a P2 Team that provides a forum for identifying and addressing stormwater pollution concerns at the facility, and to ensure that the SWPPP is appropriately implemented. The P2 Team consists of members of the Bureaus of Environmental Services and Facilities as well as LPWRP personnel. The P2 Team is responsible for the following:

- Supporting implementation of all NPDES permit(s), SWPPP requirements, and BMPs;
- Identifying any changes in LPWRP operations, maintenance, design, or BMPs to determine whether revisions must be made to this SWPPP;
- Providing quality assurance and quality control for all recordkeeping and internal reporting that are part of the SWPPP implementation;
- Supporting the Routine Facility Inspections; Quarterly Visual Inspections; and Comprehensive Site Compliance Evaluations;
- Identifying and implementing Corrective Actions;
- Maintaining recordkeeping;
- Providing regular P2 training to LPWRP employees;
- Maintaining consistency between the SWPPP and other environmental management plans and permits.

The P2 Team will meet at least annually to discuss stormwater-related problems, issues, or concerns. The Team Leader may call additional meetings, as needed, to address specific events or issues. Additional attendees, such as consultants, vendors, or representatives of other County departments, may be invited to the meetings to provide perspective on stormwater pollution issues or input to solving complex site problems. The P2 Team will also ensure that the training described in Section 5.0 occurs annually, or more frequently as deemed necessary by the P2 Team.

Members of the LPWRP P2 Team and their contact information are identified in Appendix C.

3.0 POTENTIAL POLLUTANT SOURCES

3.1 DESCRIPTION OF FACILITY AND FACILITY ACTIVITIES

LPWRP is located at 8900 Greenwood Place, Savage, Howard County, Maryland, and is operated by Howard County. The coordinates of the facility are 39.1251°N and -76.81271°S.

The site is classified as industry Sector T: Treatment Works and Sector AD.a; Department of Public Works and Highway Maintenance Facilities. The facility is a wastewater treatment plant that has been in operation since the 1960s and primarily serves central Howard County, which consists of a little over half of the County's population and the towns of Columbia, Savage, and North Laurel. Approximately 820 miles of gravity and force main sewer pipes convey wastewater to the plant. Additional waste from the western portion of the County, which is primarily rural, is transported to LPWRP via septic trucks. The eastern portion of the County is not served by LPWRP.

The facility encompasses 38 acres of land and is bordered by railroad tracks to the south, Corridor Industrial Park to the north, Junction Industrial Park to the east, and Little Patuxent River to the west. Guilford Run, a tributary of the Little Patuxent River, flows through the site from the northern property line through two culverts, prior to discharging into the Little Patuxent River near the southwestern corner of the property.

LPWRP recently expanded the facility's wastewater treatment capacity including additional process reactors, final clarifiers, and a denitrification filter complex. This construction took two years and was completed in Spring of 2012. Currently, construction for the installation of solar panels over the parking lot is underway.

The Facility was previously covered under General Discharge Permit for Storm Water Associated with Industrial Activity, Discharge Permit Number 02-SW, issued 1 December 2002.

General location and detailed site-specific maps are located in Appendix D.

3.2 POTENTIAL POLLUTANT SOURCES BY DRAINAGE AREA

LPWRP features eight main drainage areas, ranging in size from 0.75 to 11 acres, which exit the site through eight outfalls. All outfalls located above the water line were observed and verified during a site inspection conducted on 8 April 2014. Outfalls D and F are located under water and could not be visually assessed. The ultimate receiving water body is the Little Patuxent River (MD-02131105); however, some drainage areas outfall to Guilford Run. Site discharges do not discharge directly into any segment of a high quality receiving water designated as Tier 2 waters. MDE has identified waters of the Little Patuxent River as impaired by fecal coliform, phosphorus, nitrogen, and total suspended solids (TSS). A completed total maximum daily load (TMDL) is available for all of the identified pollutants. The estimated area of industrial activity at the site that is exposed to stormwater is approximately 38 acres. Drainage areas are identified in the site-specific maps located in Appendix D.

3.2.1 Drainage Area 1

Primary Activities:	*Digestors 1-2, Pretreatment Aerobic Reactors, Solids/Dewatering Facility*
Drainage Area:	*4.04 acres*
Imperviousness:	*High*
Number of reported spills (2011-2014):	*2*
Largest reported spills (2011-2014):	*5,292 gallons (treated wastewater)*
Comments:	*Outfall B and Monitoring Point 02*

Drainage Area 1 is located primarily in the southeast corner of the site. Stormwater drains from the paved and developed portions of the site down a small slope to a channel that runs along the eastern boundary and empties into a storm drain that runs along the southern boundary of the site. Stormwater is discharged from the site at Outfall B. Outfall B occurs just east of the confluence of Guilford Run and the Little Patuxent River. Monitoring for this drainage area will take place at Monitoring Point 02.

3.2.2 Drainage Area 2

Primary Activities:	*Final Clarifiers 6-9, East/West Process Reactors, Denitrification Filter Complex, Chlorine Building, Methanol Facility*
Drainage Area:	*10.92 acres*
Imperviousness:	*Moderate*
Number of reported spills (2011-2014):	*7*
Largest reported spills (2011-2014):	*100,000 gallons (Final Clarifier effluent prior to disinfection)*
Comments:	*Outfall G and Monitoring Point 06; Outfall H and Monitoring Point 07*

Drainage Area 2 is located in the northeast corner of the site. Stormwater drains toward Guilford Run, which is located in the center of the drainage area. There are two outfalls associated with Drainage Area 2, both which are along Guilford Run. The first is Outfall G, which is monitored via Monitoring Point 07. This monitoring point will identify any pollutants that are entering the property line. The second is Outfall H which is located at the south end of the drainage area. Monitoring Point 07 is associated with this outfall and will identify pollutants for Drainage Area 2 prior to being ultimately discharged from the property line at Outfall B.

3.2.3 Drainage Area 3

Primary Activities:	*Primary Clarifier 4-5, Final Clarifier 5, South Pump Station*
Drainage Area:	*4.75 acres*
Imperviousness:	*Moderate*
Number of reported spills (2011-2014):	*4*
Largest reported spills (2011-2014):	*25 gallons (Liquid discharge from bio-solids loading trailer)*
Comments:	*Outfall B and Monitoring Point 02*

Drainage Area 3 is located in the southwest corner of the site. Stormwater drains toward Guilford Run, which is located in the center of the drainage area. Guilford Run is discharged from the site through two 72-inch reinforced concrete pipes at Outfall B. Outfall B occurs just east of the confluence of Guilford Run and the Little Patuxent River. Drainage Area 3 also receives stormwater from Drainage Area 2.

3.2.4 Drainage Area 4

Primary Activities:	*Primary Clarifier 5, Headworks Substation, Auxiliary Pumpstation*
Drainage Area:	*1.13 acres*
Imperviousness:	*High*
Number of reported spills (2011-2014):	*1*
Largest reported spills (2011-2014):	*2 gallons (Diesel oil)*
Comments:	*Outfall C and Monitoring Point 04*

Drainage Area 4 is located along the western boundary of the site. Stormwater drains west from the developed and paved areas of the site to a swale along the shoulder of the perimeter road. Stormwater is then diverted into a storm drain, which discharges into the Little Patuxent River at Outfall C.

3.2.5 Drainage Area 5

Primary Activities:	*Flow Equalization Basin 3, Septage Facility, Headworks Building*
Drainage Area:	*1.03 acres*
Imperviousness:	*Moderate*
Number of reported spills (2011-2014):	*1*
Largest reported spills (2011-2014):	*2 gallons (Partially treated wastewater)*
Comments:	*Outfall D (closed) and Monitoring Point 04*

Drainage Area 5 is located along the western boundary of the site. Stormwater drains west from the developed and paved areas of the site to a swale along the shoulder of the perimeter road. Stormwater is then diverted into a storm drain, which no longer discharges into the Little Patuxent River at Outfall D because this outfall was welded shut. The water will either enter directly into the Little Patuxent River from the road or via Outfall E which is still open. Due to

the similar nature of operations and the same discharge location, Monitoring Point 04 will be used for drainage area 5 and 6.

3.2.6 Drainage Area 6

Primary Activities:	*Flow Equalization Basin 1*
Drainage Area:	*0.75 acres*
Imperviousness:	*Moderate*
Number of reported spills (2011-2014):	*0*
Largest reported spills (2011-2014):	*N/A*
Comments:	*Outfall E and Monitoring Point 04*

Drainage Area 6 is located along the western boundary of the site. Stormwater drains west from the developed and paved areas of the site to a swale along the shoulder of the perimeter road. Stormwater is then diverted into a storm drain, which discharges into the Little Patuxent River at Outfall E.

3.2.7 Drainage Area 7

Primary Activities:	*Primary Clarifier 1-3, Final Clarifiers 2-4 and 10-12, Fermenter 1, North Process Reactors, East/West Process Reactors, North Pump Station, Electrical Substation, Grit Basin, Flow Equalization Basin 2*
Drainage Area:	*11.00 acres*
Imperviousness:	*High*
Number of reported spills (2011-2014):	*1*
Largest reported spills (2011-2014):	*25 gallons (Partially treated wastewater)*
Comments:	*Outfall F and Monitoring Point 05*

Drainage Area 7 is located primarily in the center of the site. The drainage area encompasses most of the wastewater treatment facilities present at LPWRP. Stormwater is primarily collected through the storm drain network. The storm drain network flows towards the northwest corner of the site, where is discharges at Outfall F into the Little Patuxent River. Monitoring Point 05 are designated for this outfall. Monitoring Point 05 will capture pollutants that are brought on from beyond the facility boundaries and the stormwater from drainage area 7.

3.2.8 Drainage Area 8

Primary Activities:	*Administration Building, Maintenance Building, Parking*
Drainage Area:	*4.25 acres*
Imperviousness:	*High*
Number of reported spills (2011-2014):	*2*
Largest reported spills (2011-2014):	*1 gallon (Hydraulic oil)*
Comments:	*Outfall A and Monitoring Point 01*

Drainage Area 8 is located in the southeast corner of the site. Stormwater drains from the paved and developed portions of the site down a small slope to a channel that runs along the east boundary and empties into a storm drain that runs along the south boundary of the site. Stormwater is discharged from the site at Outfall A. Monitoring for this drainage area will take place at Monitoring Point 01.

3.3 SPILLS AND LEAKS

Experience indicates a reasonable potential for equipment failure that could result in a discharge of oil. Discharges of oil can potentially occur due to equipment malfunction or tank loading and unloading operations. In the event of a release, potential discharge directions, rates, and volumes for aboveground bulk oil storage containers and oil-filled operational equipment with capacities greater than 55-gallons are described in this section.

LPWRP maintains a Spill Log to document all minor and major spill events. The Facility has a Spill Prevention, Control, and Countermeasure (SPCC) Plan in accordance with 40 Code of Federal Regulations (CFR) 112, Oil Pollution Prevention.

There are ten aboveground storage tanks (ASTs) located at LPWRP, including fixed and mobile. Tank 001A (275 gallon, diesel fuel) is behind the maintenance building and sits under a covered canopy. The tank is double-walled and is equipped with a visual level gauge. Tank 002A (1,000 gallons, diesel fuel) is located north of the maintenance building is double-walled and also equipped with a visual level gauge. Tank 004 (1,500, diesel fuel) and Tank 005A (75 gallons, diesel fuel) are double-walled tanks located at the radio tower. Tank 004A is equipped with an audible overfill alarm and interstitial space leak monitoring alarm and Tank 005A is equipped with a high level alarm. Tank 006A (1,200 gallons, diesel fuel) is equipped with a visual fill gauge and fuel level alarm and is located on the west side of the facility inside the emergency generator trailer. Spills occurring from this tank would be contained within the emergency generator trailer. Tank 013A (275 gallons) contains used oil and is double-walled with a visual gauge. This tank is located outside of the storage building. Two mobile tanks for emergency generators, 007A (150 gallons) and 008A (420 gallons), and a mobile fueling truck, Tank 009A (100 gallons), are typically parked north of the maintenance building. Tanks 007A and 009A are single-walled and Tank 008A is double-walled with an overfill alarm. Tank 018A (500 gallons) is a portable AST containing used oil and is located north of the maintenance shop. The mobile fueling truck has a portable spill kit in the event of a spill so immediate action can be taken.

Inside the maintenance building is a drum storage room. Drums are either stored on their sides on racks on each side of the room or on a spill pallet. Drum contents include motor oil, lubricating oil, gear oil, hydraulic oil, mineral oil, and transmission fluid. To prevent any drips or leaks from collecting on the floor, drip pans with absorbent pads or materials are placed under the spouts of the oil drums. There are no floor drains in the room, so any spill that occurs would collect on the floor and absorbent located in the room would be used for cleanup purposes.

The LPWRP maintains a Spill Log to document all minor and major spill events. The Facility has a Spill Prevention, Control, and Countermeasure (SPCC) Plan in accordance with 40 Code of Federal Regulations (CFR) 112, Oil Pollution Prevention. Please reference the facility maps in Appendix D for locations of all spills that have occurred in the past 3 years at LPWRP. A spill history describing these significant spills and leaks of oil, toxic, or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance can be found in Appendix G.

3.4 NON-STORMWATER DISCHARGES

Non-stormwater discharges are a potential pollutant source and must be evaluated as required by the 12-SW. In general, non-stormwater discharges are prohibited; however, the 12-SW allows exceptions for the following activities:

- Water used to fight active fires (excludes fire system cleaning or testing);
- Pavement wash water which contains no detergents and/or spills/leaks of toxic or hazardous material;
- Landscape watering (only if any pesticides, herbicides, and/or fertilizers have been applied in accordance with labeling);
- Routine external building wash down that does not contain detergents or dislodged paint chips;
- Uncontaminated condensate from air conditioners, coolers, compressors, and/or outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Uncontaminated ground or spring water;
- Foundation or footing drains where flows are not contaminated with process materials; and
- Incidental windblown mist from cooling towers (excludes intentional discharges).

An evaluation of the facility for prohibited, non-stormwater discharges has been performed as part of this SWPPP development. The completed Non-Stormwater Discharge Evaluation form,

which includes outfall identification, observed non-stormwater discharges and corresponding outfalls, and corrective actions, is included in Appendix E.

3.5 SALT STORAGE

No salt is stored onsite.

3.6 VISUAL MONITORING SUMMARY

LPWRP was previously covered under General Discharge Permit for Storm Water Associated with Industrial Activity, Discharge Permit Number 02-SW, issued 1 December 2002, which did not require visual monitoring. Therefore, visual monitoring has not been performed to date at LPWRP. Upon submittal of this NOI, quarterly visual inspections will commence as required by the 12-SW permit conditions and as described in Section 7.1.3.

4.0 STORMWATER CONTROL MEASURES

Howard County has coverage under a Municipal Separate Storm Sewer System (MS4) NPDES Permit (Number MD0068322, 00-DP-3318). The facility is owned by Howard County and is permitted as an MS4; therefore, this facility is not specifically required to meet the Chesapeake Bay Restoration Requirements as outlined in the 12-SW.

The Facility is classified as both industry Sector AD.a; Department of Public Works and Highway Maintenance Facilities and Sector T; Treatment Works. Sector AD.a requires that the SWPPP include the requirements listed in Sector P – Land Transportation and Warehousing. The following list of requirements captures both the general and sector-specific stormwater control measures at the Facility:

- Minimize Exposure
- Good Housekeeping
- Maintenance
- Vehicle and Equipment Storage*
- Vehicle and Equipment Cleaning*
- Vehicle and Equipment Maintenance Areas*
- Fueling Areas*
- Material Storage Areas*
- Spill Prevention and Response
- Erosion and Sediment Control
- Management of Runoff
- Salt Storage Piles
- Non-Effluent Limits
- Employee Training
- Non-Stormwater Discharges
- Waste, Garbage, and Floatable Debris
- Dust Generation and Vehicle Tracking*
- Routing Stormwater to Treatment Works**
- Covering Exposed Materials**

*These requirements are specifically identified in Sector AD.a; Department of Public Works and Highway Maintenance Facilities. ** These requirements are identified as control measures to consider in Sector T; Treatment Works.

4.1.1 Minimize Exposure

Structural controls and practices are used to minimize the exposure of industrial activities to rain, snowmelt and runoff at LPWRP. Containment dikes, coverings and double-walled tanks are utilized for ASTs at LPWRP. At areas where loading and unloading occur, such as the methanol tanks and sludge loading, curbing is utilized to contain any spills that would occur. Within the oil drum room, drip pans are placed under the spouts to capture any dripping that would otherwise collect on the floor. Assigned parking locations are used for facility and personnel vehicles. Solar panels are currently being installed over the parking area which will provide covered parking

next to the administration building. Trench drains and collection basins can be found throughout buildings and in loading areas that would collect any spills. These drains are routed back to the plant for treatment.

4.1.2 Good Housekeeping

Good housekeeping practices require the maintenance of a clean, orderly facility. It is often the least expensive and most effective way to prevent stormwater pollution. Howard County facilities are visually observed each operating day by the Superintendent and employees, and any housekeeping issues are addressed in an expedient manner.

The Plant Supervisor performs a visual inspection on a monthly basis in compliance with the SPCC Plan. This inspection includes inspection of ASTs, containers, and hazardous and universal waste storage areas. This inspection is documented and maintained by both the Superintendent and BES.

BES contacts each facility Superintendent every 80 days to prompt each Superintendent of the need for a hazardous waste pick-up by Howard County's licensed contractor (Clean Harbors). BES contacts Clean Harbors and coordinates the logistics for the hazardous waste collection at each facility.

Solid Waste dumpsters located at LPWRP are emptied weekly by Ecology Services.

4.1.3 Maintenance

Maintenance of industrial equipment at Howard County facilities is managed by the Bureau of Utilities. The Bureau of Utilities is responsible for equipment that contributes to the functionality of the buildings at the facility, such as emergency generators, boilers, and ASTs contain heating oil. The Bureau of Utilities manages their preventative maintenance through an automated work order system which schedules, tracks, and assigns responsible person(s) and deadlines for a task and the date completed. Bureau of Utilities employees regularly check on emergency generators and heating oil tanks to ensure they are in good condition and operating correctly. The Bureau of Facilities is responsible for Tank 004A located at the radio tower.

For more specialized maintenance such as maintenance for oil/water separators and septic systems, the maintenance is managed through the work order system, but is performed by a contractor.

4.1.4 Vehicle and Equipment Storage

LPWRP currently parks all vehicles outdoors near the administration building. Water from these lots is primarily discharged through Outfall A.

The Howard County Spill Response and Notification Standard Operating Procedure (SOP), which outlines procedures for stopping, containing, and cleaning up spills as well as notification requirements, is included in Appendix F. Agencies and contact information are also included in the table at the front of this document.

4.1.5 Vehicle and Equipment Cleaning

All vehicles and equipment are washed at the vehicle wash pad. All water from the vehicle wash pad is collected by a trench drain and sent via discharge pipe to the plant's headworks and treated as wastewater. This results in a low potential for wash water to enter the surrounding environment.

4.1.6 Vehicle and Equipment Maintenance Areas

All vehicle and mechanical equipment maintenance is performed offsite.

4.1.7 Fueling Areas

All fueling for vehicles occurs offsite. A mobile fueling truck used for onsite equipment (Tank 009A) is typically parked outside the maintenance building. A portable spill kit is maintained in the truck.

The Howard County Spill Response and Notification SOP, which outlines procedures for stopping, containing, and cleaning up spills as well as notification requirements, is included in Appendix F. Agencies and contact information are also included in the table provided at the front of this document.

LPWRP has fuel ASTs located throughout the site, which are periodically re-filled by a contractor, Mansfield. The potential risk of pollution generation for this source is low as long as contractors perform transfers with care and attention. In order to reduce the risk of a spill and ensure proper response, Howard County will rely on the state fuel delivery contract language administrated through the Department of General Services (DGS) for Mansfield, which references specific Maryland regulatory requirements including COMAR 26.10.01.17. In addition, the contract language defines the responsibility of the contractor for spills or releases during fuel delivery and requires that the contractor provides copies of written fuel delivery procedures. In addition, Howard County will require Mansfield to provide spill prevention and response training records of all fuel delivery drivers on at least an annual basis. See the LPWRP SPCC plan for additional details related to fueling by subcontractors.

4.1.8 Material Storage and Loading Areas

Lime is stored in powder form in a silo and in 55-gallons drums. These silos and storage drums are located outside the centrifuge building on the west side. Due to the current outdoor, uncovered storage of these drums, the potential for stormwater pollution is high. Bio-solids, a byproduct of the treatment process, are dropped into trucks from a screw conveyor inside a closed storage area. Covered trucks transport the sludge to the approved offsite locations.

Screenings from wastewater and grit are loaded into trucks inside garages. The trucks transport the solids to RESCO in Baltimore City. The potential risk of stormwater pollution for this source is low.

One location of liquid unloading and three locations of materials (both liquid and solids) loading require hoses and connections from the truck to the buildings. Septage is transferred from waste hauling trucks to a drain that flows to a holding tank and ultimately is piped into the plant's headworks for treatment. Sodium hydroxide (NaOH), sodium hypochlorite, sodium bisulfate, and alum (all in liquid form) are transferred from the delivery trucks to the storage tanks in the buildings by hose and connections. For accidental spills or leaks at the connections, or catastrophic failures of the truck vessel or storage area, spill drains exist in these transport areas, which are also connected to the plant's headworks. Since any spills would be directed to the beginning of the plant, the potential for stormwater pollution is low.

Inside the maintenance building is a drum storage room. Drums are stored either on their sides on racks on each side of the room or on a pallet. Drum contents include motor oil, lubricating oil, gear oil, hydraulic oil, mineral oil, and transmission fluid. There is no floor drain in this room and all spills are contained to the room so the potential for stormwater pollution is low.

Howard County maintains a Hazard Communication (HAZCOM) Plan applicable to all of its facilities. The HAZCOM program is currently transitioning to the Globally Harmonized System and this transition will be completed by 1 June 2015. It is Howard County's policy that all chemicals must be properly labeled throughout their use.

Each Facility has designated a qualified individual who is responsible for ensuring all labels are properly affixed when delivered to the site, and throughout the chemical use. Each primary container of hazardous chemicals will be clearly and legibly labeled with the product identifier, signal word, hazard statement(s), pictogram(s), precautionary statement(s), and supplier identification. Each secondary container of hazardous chemicals must be labeled at a minimum with the trade name(s) of the chemical(s). Portable containers filled with a hazardous chemical are not required to be labeled if both the following conditions apply:

- The employee filling the portable container also is the one who will use the chemical, and
- The employee will use the entire chemical immediately after transferring it to the container.

Safety information and other warnings shall be provided in clear and easily understandable formats including the use of Safety Data Sheets, which are present in accessible areas onsite. More detailed information may be found in the Howard County Hazard Communication Plan, located on the Howard County intranet site.

Any waste containers in material storage areas must be labeled with their specific contents (e.g. used oil, waste paint, etc.). Hazardous waste containers stored in satellite accumulation areas must have the words "hazardous waste" or the specific contents of the waste. Any hazardous waste containers located in the main accumulation area must have the words "hazardous waste," the specific content/type of waste, and the hazardous property of the waste, and must list the accumulation start date.

The Howard County Spill Response and Notification SOP, which outlines procedures for stopping, containing, and cleaning up spills as well as notification requirements, is included in Appendix G. Agencies and contact information are also included in the front of this document.

4.1.9 Spill Prevention and Response

A discharge of oil or other chemicals to groundwater, surface water, or soil is prohibited by regulations and immediate action must be taken to control, contain, and recover discharged product. Please note that spill containment and cleanup are of secondary importance when compared to the health and safety of personnel. The immediate action(s) to be taken will depend on the capabilities of the person discovering the incident, his or her training and understanding of the incident, and the resources available in the area of the incident. In all cases, the initial response actions should only be conducted in a safe manner, ***placing the safety and security of persons in the area above all other factors***.

The drum storage room within the maintenance building does not contain a floor drain. This prevents any spills that occur in the room from release into the stormwater drains. During material transfer operations, care is taken by operators to minimize spills.

The facility has an SPCC Plan in accordance with 40 CFR 112, Oil Pollution Prevention. Please reference Section 5.,; Facility Description and Discharge Prevention, and Section 8.0, Containment and Diversionary Structures within the facility SPCC for additional information.

As discussed previously in Section 4.1.8, Howard County maintains a HAZCOM Plan applicable to all of its facilities. It is Howard County's policy that all chemicals must be properly labeled throughout their use. More detailed information may be found in the Howard County Hazard Communication Plan, located on the Howard County intranet site.

The Howard County Spill Response and Notification SOP, which outlines procedures for stopping, containing, and cleaning up spills as well as notification requirements, is included in Appendix F. Agencies and contact information are also included in the table located in the front of this document.

4.1.10 Erosion and Sediment Controls

Erosion concerns can be divided into two broad categories:

i. Erosion due to active construction projects, and

ii. Chronic or nuisance eroding areas due to inadequate conveyance, steep slopes, erodible fills, etc.

The first category of erosion potential is associated with various development projects being actively constructed or planned on facility property. The Howard County agency responsible for the construction submits the application for the General Discharge Permit for Construction Activity from MDE for projects that will disturb one or more acres of earth. In accordance with applicable regulations, for each construction project, an erosion and sediment control plan will

need to be developed by a professional engineer, incorporated into the project design, and approved by the local and state regulatory agencies. These plans will identify the specific control measures that will be in place during construction to minimize erosion and sedimentation. The Construction Inspection Division of the Bureau of Engineering inspects all active construction projects on Howard County property to ensure compliance with erosion and sediment control plans.

The second category of erosion and sedimentation problems involves areas that may experience nuisance erosion due to inadequate conveyance, steep slopes, or erodible fills. Areas of erosion will be identified during the Quarterly Routine Facility Inspection and the annual Comprehensive Site Compliance Evaluation (CSCE).

During periods of construction, proper erosion and sediment controls are utilized at LPWRP. This includes silt fences and gabion cages located near outfalls and in the water channels.

4.1.11 Management of Runoff

Devices and facilities to manage stormwater runoff may include catch basins, underground chambers, detention basins, wet ponds, oil/water and oil/grit separators. The various facilities and devices provide different types of stormwater quality and quantity management. For example, a typical stormwater basin may be designed to provide quantity management for attenuating peak discharges and targeting pollutants like sediment and phosphorus from paved areas, whereas an oil/water separator is utilized to remove petroleum from lower flows through the drainage system. All future developments at the site will satisfy the requirements of the 2000 Maryland Design Manual, Volumes I & II.

LPWRP utilizes swales and riprap-lined channels to facilitate stormwater flow and help prevent erosion. In addition, a large storm drain network is present on the western portion of the site to direct stormwater away from the clarifiers, reactors, etc.

All significant materials are stored inside the buildings where they are used. The exception to this is lime. In addition to being stored in the silos outside of the centrifuge building, lime is also stored outdoors in 55-gallon drums. These drums are kept covered to prevent contamination with stormwater. Material loading/unloading practices are either hose/pipe connections between the truck and tank or bags/drums fork-lifted from a truck into a building. The current plant procedures for materials handling prevents stormwater contamination without the need for additional structural/non-structural controls.

4.1.12 Salt Storage Piles or Piles Containing Salt

No salt is stored onsite at LPWRP.

4.1.13 Routing Stormwater to Treatment Works

In areas with a higher potential for stormwater contamination the drains are connected back to the head of the plant. This includes sludge loading, waste, sewage offloading, polymer tank

building, and the wash rack. The contact water is pumped back to the headworks building and enters the treatment train at the beginning of the wastewater treatment process.

4.1.14 Covering Exposed Materials

LPWRP has taken measures to minimize the exposure of solids to stormwater. The septage facility, where sewage is trucked in and offloaded for treatment, employs a hose that is connected to the building. This hose allows for the transfer of material to occur within the building minimizing the exposure to stormwater. The hose is a permanent fixture that sewage trucks will connect to for septage offloading. Secondary containment is located outside at the offloading area to contain any spills that occur during the septage offloading process. All grit and grease removal equipment is stored inside the building. Grit screened waste is loaded and transported offsite. The transfer is done indoors and the drains are connected to the sanitary sewer. The sludge drying bed is also located inside and has secondary containment connected to the sanitary sewer.

4.1.15 Sector-Specific Non-Numeric Effluent Limits

The site is classified both as industry Sector AD.a; Department of Public Works and Highway Maintenance Facilities and Sector T; Treatment Works. Sector AD.a requires that the SWPPP include the requirements listed in Sector P – Land Transportation and Warehousing.

Sector T: Treatment Works
This Sector requires additional control measures and/or technology-based effluent limits, outlined in Appendix D of the 12-SW. These control measures are discussed within this section of the SWPPP, and include control measures (such as routing stormwater to the treatment works and covering exposed materials) and employee training.

Sector AD.a: Department of Public Works and Highway Maintenance Facilities
This Sector requires additional control measures and/or technology-based effluent limits, outlined in Appendix D of the 12-SW. These control measures are discussed within this section of the SWPPP, and include Vehicle and Equipment Storage, Vehicle and Equipment Cleaning, Vehicle and Equipment Maintenance Areas, Fueling Areas, Material Storage Areas, Dust Generation, and Vehicle Tracking and Employee Training. Locomotive Sanding is another operation included in this Sector of the 12-SW; however, this operation does not occur at Howard County facilities.

4.1.16 Non-Stormwater Discharges

Non-stormwater discharges are a potential pollutant source and must be evaluated as required by the 12-SW. In general, non-stormwater discharges are prohibited; however, there are exemptions as discussed previously in Section 3.4 of this Plan. An evaluation of the facility for prohibited, non-stormwater discharges was performed. The completed Non-Stormwater Discharge Evaluation form, which includes outfall identification, observed non-stormwater discharges and corresponding outfalls, and corrective actions, is included in Appendix E.

4.1.17 Waste, Garbage, and Floatable Debris

Two general types of waste generated from the plant are as follows:

- Normal solid waste generated by the plant personnel as part of routine operations
- Solid residuals from the wastewater treatment process

The routine solid waste generated during plant operations are collected in dumpsters/containers located near the Administration Building and the Maintenance Shop. The dumpsters/containers are emptied into a truck for hauling to the Alpha Ridge Landfill. If the dumpsters are covered consistently, the potential for stormwater pollution is low.

Solid residuals include screenings from wastewater, grit removed from the wastewater, and bio-solids. All of these materials are loaded onto trucks inside a garage or within other buildings. Screenings and grit from the wastewater are taken to RESCO in Baltimore City for incineration. Bio-solids generated at LPWRP are classified as Class A bio-solids and are transported by Synagro for land application on various fields. The risk of contributing potential pollutants is low during the loading process.

4.1.18 Dust Generation and Vehicle Tracking of Industrial Materials

All often-traveled roads are paved to reduce the presence of dust.

5.0 EMPLOYEE TRAINING

Training is necessary to ensure that LPWRP personnel are aware of their impact to stormwater, their responsibilities to prevent pollution, and methods to control such pollution release. All training is to be organized and coordinated through the P2 Team and Howard County DPW BES. Howard County DPW BES will conduct the training.

The goals of the training are as follows:

- Educate facility staff at all levels of responsibility on the purpose, requirements, and implementation activities of the SWPPP.

- Promote overall awareness of stormwater pollution prevention to facility staff.

- Integrate the stormwater pollution prevention strategy into existing facility practices.

The topics covered during the training include, but are not limited to:

- Purpose of SWPPP
- NPDES/SWPPP requirements
- SWPPP contents
- Hydrology and water quality basics
- Minimize exposure
- Good housekeeping measures
- Maintenance
  - Used oil and spent solvent management*
  - Fueling procedures*
  - Painting procedures*
  - Used battery management*
- Spill prevention and response procedures
- Erosion and sediment controls
- Management of runoff
- Salt Storage
- Petroleum Product Management
- Process Chemical Management
- Procedures for Using Herbicides, Fertilizers, and Pesticides
- Effluent Limits
- Non-stormwater discharges
- Waste, garbage, and floatable debris
- Dust generation and vehicle tracking
- Monitoring
- Inspections

*These requirements are specifically identified in Sector AD.a; Department of Public Works and Highway Maintenance Facilities.

The P2 Team and BES will alert the staff in advance of the training session to ensure full participation in the event. Training sessions are to be held annually for LPWRP personnel. Attendance at an annual training event for each calendar year is mandatory for all employees. Additional training will be held on an as-needed basis for new employees. Each employee must sign an attendance sheet verifying that the employee was present at the training event. The attendance sheet and a brief description of the training topics discussed must then be stored with this SWPPP or in a central file at BES.

Other training sessions will be held as necessary for members of the P2 Team or other LPWRP personnel to address specific topics of interest. Topics for such training sessions may include basic concepts of P2 and stormwater control measures (for new P2 members), and proper use and maintenance of stormwater control measures. Training on these topics will be scheduled on an as-needed basis by the P2 Team Leader in coordination with the P2 Team.

An outline of sample stormwater pollution prevention training and a sample attendance sheet are included in Appendix H.

6.0 MONITORING

6.1 SCHEDULES AND PROCEDURES FOR MONITORING

6.1.1 Benchmark Monitoring

Benchmark Monitoring is not required for facilities that fall within Sector AD.a; Department of Public Works and Highway Maintenance Facilities, Sector P – Land Transportation and Warehousing, or Sector T; Treatment Works of the 12-SW. This Facility is classified under both Sector AD.a and Sector T and therefore not required to perform benchmark monitoring.

6.1.2 Impaired Waters Monitoring

This Facility discharges to the Little Patuxent River, which is classified as "impaired waters." The river is impaired by fecal coliform, phosphorus, nitrogen, and TSS. At the time of the submittal of the NOI for the 12-SW, the Facility has not conducted any voluntary monitoring of the impaired waterway. Howard County will await any further direction from MDE in regards to additional monitoring, limits, or controls of this waterway, if necessary, to be consistent with the waste load allocation of the EPA-approved TMDL.

7.0 INSPECTIONS, CORRECTIVE ACTIONS AND RECORDKEEPING

7.1 INSPECTIONS

7.1.1 Comprehensive Site Compliance Evaluation (CSCE)

Howard County BES will facilitate a CSCE of the Facility on an annual frequency. The evaluations will be performed by a qualified person designated by Howard County BES with the Plant Supervisor. The CSCE of the Facility will replace one of the quarterly routine inspections. A schedule that outlines all Howard County inspections relative to the SWPPP program is included in Appendix I.

At a minimum, the CSCE will include an inspection of the following where materials or activities are exposed to stormwater:

- Industrial materials, garbage, or debris that may have or could come into contact with stormwater;
- Leaks or spills from vehicles/equipment, drums, ASTs, transformers, emergency generators, or other containers that have occurred within the past 3 years;
- Storage areas for vehicles/equipment awaiting maintenance*;
- Fueling areas*;
- Indoor/outdoor vehicle equipment maintenance areas*;
- Material storage areas*;
- Vehicle/equipment cleaning areas*;
- Unloading/loading areas*;
- Grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station**;
- Access roads or rail lines as applicable**;
- Offsite tracking of sediment where vehicles enter or exit the site;
- Tracking or blowing of sediment or materials from areas of no exposure to exposed areas;
- Evidence of, or the potential for, pollutants entering the drainage system;
- Evidence of pollutants discharging to surface waters at all facility outfalls;

- The condition of and around any outfall, including flow dissipation measures to prevent erosion (scouring);

- Training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs; and

- Completeness of records.

*These requirements are specifically identified in Sector AD.a; Department of Public Works and Highway Maintenance Facilities. **These requirements are specifically identified in Sector T; Treatment Works.

The Plant Supervisor will record the routine facility inspection on the checklist (Appendix J). The checklist will include a certification that the Facility is in compliance with the SWPPP and 12-SW or include a record of deficiencies with follow up actions.

Howard County BES requests electronic copies of the complete Routine Facility Inspection on a regular basis. BES will review the checklist for completeness and for "triggering events." BES will be responsible for coordinating and documenting the corrective action process. The SWPPP will be modified as necessary based upon the observations noted during the routine facility inspection.

All records of the routine facility inspection including resulting corrective actions will be maintained for a minimum of 5 years by BES.

7.1.2 Routine Facility Inspections

Routine facility inspections will be conducted at least once per quarter to review the effectiveness of the SWPPP. The Facility Superintendent will facilitate the routine inspection to ensure one inspection is conducted during a stormwater discharge event and that at least one member of the Pollution Prevention Team participates in each inspection. A schedule that outlines all Howard County inspections relative to the SWPPP program is included in Appendix I.

The CSCE (described in Section 7.1.1) of the Facility will replace one of the quarterly routine inspections. At a minimum, the routine facility inspection will include an inspection of the following where materials or activities are exposed to stormwater:

- Industrial materials, garbage, or debris that may have or could come into contact with stormwater;

- Leaks or spills from vehicles/equipment, drums, ASTs, transformers, emergency generators, or other containers that have occurred within the past 3 years;

- Storage areas for vehicles/equipment awaiting maintenance*;

- Fueling areas*;

- Indoor/outdoor vehicle equipment maintenance areas*;
- Material storage areas*;
- Vehicle/equipment cleaning areas*;
- Unloading/loading areas*;
- Grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station**;
- Access roads or rail lines as applicable**;
- Offsite tracking of sediment where vehicles enter or exit the site;
- Tracking or blowing of sediment or materials from areas of no exposure to exposed areas;
- Evidence of, or the potential for, pollutants entering the drainage system;
- Evidence of pollutants discharging to surface waters at all facility outfalls;
- The condition of and around any outfall, including flow dissipation measures to prevent erosion (scouring);
- Training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs; and
- Completeness of records.

*These requirements are specifically identified in Sector AD.a; Department of Public Works and Highway Maintenance Facilities. **These requirements are specifically outlined in Sector T: Treatment Works.

The inspector(s) will record the routine facility inspection on the inspection checklist (Appendix J). The checklist will include a certification that the Facility is in compliance with the SWPPP and 12-SW or include a record of deficiencies with follow-up actions.

Howard County BES requests electronic copies of the complete Routine Facility Inspection on a regular basis. BES will review the checklist for completeness and for "triggering events." BES will be responsible for coordinating and documenting the corrective action process. The SWPPP will be modified as necessary based upon the observations noted during the routine facility inspection.

All records of the routine facility inspection including resulting corrective actions will be maintained for a minimum of 5 years by BES.

7.1.3 Quarterly Visual Inspection

This Facility was previously covered under the General Discharge Permit for Storm Water Associated with Industrial Activity, Discharge Permit Number 02-SW, issued 1 December 2002, which did not require visual inspections. Visual inspections have not been performed to date at the Facility. A schedule that outlines all Howard County inspections relative to the SWPPP program is included in Appendix I.

Quarterly visual inspections will commence during the first full quarter after the facility has been notified of coverage under the 12-SW. The monitoring quarters are as follows: 1 January through 31 March; 1 April through 30 June; 1 July through 30 September; and 1 October through 31 December. BES is responsible for the quarterly visual inspections and has subcontracted this effort.

The general procedure for visual inspections is as follows:

- At least once each quarter, a designated individual from Howard County's consultant will collect a stormwater sample from Monitoring Points 1 through 8.

  — The sample must be collected during an active discharge of stormwater.

  — One is not required to sample during an adverse weather event (i.e., events which are dangerous or create inaccessibility such as flooding, high winds, electrical storms, etc.). A substitute sample must be taken from the next qualifying storm event. Documentation for this must be included in SWPPP records.

  — The Facility is not required to sample during conditions which make sampling otherwise impractical, such as drought or extended frozen conditions. A substitute sample must be taken from the next qualifying storm event. Documentation for this must be included in SWPPP records.

- Any deviations from a regular quarterly scheduled inspection must be documented.

- Samples may be taken during any precipitation event where there is a measurable discharge from the outfall. This includes snow melt.

- Samples must be collected within the first 30 minutes of the storm event.

- Samples should be collected within a clear container.

- The Quarterly Visual Monitoring Form (located in Appendix K) is required to be completed for each sample.

- The Quarterly Visual Monitoring Form has entries for visual parameters during the time immediately following sample collection, and visual parameters for 30 minutes following sample collection.

Howard County BES will receive copies of the Quarterly Visual Monitoring form for the Facility from the contractor, once completed. BES will review the form for completeness and for "triggering events." BES will be responsible for coordinating and documenting the corrective action process.

All records of quarterly visual monitoring forms will be maintained for a minimum of 5 years.

7.2 CORRECTIVE ACTION PROCEDURE

7.2.1 Internal Corrective Action Procedure

Internal corrective actions refer to non-reportable and reportable corrective actions. Non-reportable corrective actions tend to be proactive in nature. Reportable corrective actions are defined by "triggering events," which is discussed further in Section 7.2.2. The facility personnel will adhere to the following procedure for managing internal corrective actions resulting from the observations during regular operations, quarterly visual inspections, routine facility inspections, and CSCE:

1. General: Maintain proper inspection and follow-up records: The inspection checklists and Quarterly Visual Inspection Form with corrective actions will serve as the records of the inspections. The checklists will include the following information:

    - Date of the inspection
    - Individual(s) conducting the inspection
    - Scope
    - Problems found/Corrective actions identified
    - Response implemented to rectify the problem

2. Corrective Actions: The individual(s) performing the routine facility inspections must use the following procedures to ensure that the appropriate corrective actions are taken:

    - The individual(s) who is responsible for performing the routine inspection must complete all items on the checklist.

    - The inspector must sign the checklist when it is complete.

    - Each inspection item on the checklist must be assigned a responsible party and completion date.

    - The individual(s) addressing the corrective action must complete the appropriate section of the checklist once the action has been implemented.

- The completed and signed checklist must be maintained with SWPPP records.

3. Management and Documentation of Corrective Actions: BES will be responsible for receiving and reviewing the Facility inspections and documenting and tracking all corrective actions. Howard County will utilize the Corrective Action Tracker spreadsheet to maintain records of all corrective actions.

7.2.2 Events Triggering MDE Reportable Corrective Actions

Howard County will develop corrective actions if deficiencies are noted during regular operations, quarterly visual inspections, routine facility inspections and CSCE.

In addition to regular corrective actions, which are proactive in nature and not necessarily a result of a noncompliance event, there are "MDE Reportable" corrective actions. If any of the following events occur, the P2 Team must review and revise the selection, design, installation, and implementation of the Facility's control measures to ensure that the condition is eliminated and will not be repeated in the future:

- An unauthorized release or discharge;

- Facility becomes aware, or the MDE determines, that the control measures are not stringent enough for the discharge to meet applicable water quality standards;

- An inspection or evaluation of the Facility by an MDE official, determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit; or

- Facility observes in the Routine Facility and Quarterly Visual Inspection and CSCE that control measures are not being properly operated and maintained.

7.2.3 Documentation of MDE Reportable Corrective Actions

The documentation of the MDE Reportable Corrective Action must be included with the CSCE documentation. The following timeline for documentation of Corrective Actions is defined within the 12-SW:

- **Within 24 hours of discovery of an event** (defined in Section 7.2.1) the Facility must document the following information: identification of the condition triggering the need for corrective action, description of the problem identified, and the date the problem was identified.

- **Within 14 days of discovery of an event** (defined in Section 7.2.1) the Facility must document the following information: summary of the corrective action taken or to be taken, justification if Facility feels that corrective actions do not need to be taken, notice of whether a SWPPP modification is required as a result of this discovery, the date the

corrective action was initiated, and the date the corrected action was (or expected to be) completed.

7.2.4 Reporting of Corrective Actions to MDE

For deficiencies that **cannot be fully addressed within 30 days of discovery** the Facility must notify Howard County BES immediately. Howard County BES will notify MDE within the 30-day time period.

7.3 RECORDKEEPING

The Facility will maintain a copy of the current SWPPP. The following records will be maintained with the SWPPP for at least 5 years:

- A copy of the NOI and correspondence between the Facility and MDE;
- A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable);
- The SPCC Plan;
- Spill log including descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to waters of the U.S., through stormwater or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases;
- NPDES/State discharge permits for wastewater and industrial, vehicle, and equipment washwater discharges or if a permit has not been issued, a copy of the pending application; or description of the disposal method and supporting documentation;
- Training records;
- Routine Facility Inspection, Quarterly Visual Monitoring Forms (including deviations) and Comprehensive Site Compliance Evaluation records; and
- Corrective actions.

8.0 REFERENCES AND INFORMATION SOURCES

Maryland Department of the Environment (MDE). 2014. General Permit No. 12-SW for Stormwater Discharges associated with Industrial Facilities.

Maryland Department of the Environment (MDE). 2009. *2000 Maryland Stormwater Design Manual.* Volumes I and II. Revisions. May.

Maryland Department of the Environment (MDE). 2011. *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control.* May.

U.S. Environmental Protection Agency (USEPA). 2009. *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators.* USEPA 833-B-09-002. February.

U.S. Environmental Protection Agency (USEPA). 1992. *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices*. USEPA 832-R-92-006.

U.S. Environmental Protection Agency (USEPA). 1992. *Summary Guidance for Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices*. USEPA 833-R-92-002.

9.0 GLOSSARY

The following glossary was extracted from MDE General Permit No. 12-SW for Stormwater Discharges associated with Industrial Facilities.

Accounting Guidance – 'Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated' dated June 2011, or its successor. This document may be found on the Department's Stormwater Management Program website or with this website link http://bit.ly/MDE_Accounting_Guidance, under Maryland's Stormwater Management Program. Industrial facilities may not consider section 9 of that document "Alternative BMPs for Consideration", which were alternative BMPs recommended by Maryland's NPDES municipalities for further examination by the Department.

Action Area – all areas to be affected directly or indirectly by the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities, and not merely the immediate area involved in these discharges and activities.

BAT – Best Available Technology Economically Achievable

Best Management Practices (BMPs) – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.

BOD5 – Biochemical Oxygen Demand (5-day test)

BPJ – Best Professional Judgment

BPT – Best Practicable Control Technology Currently Available

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CFR - Code of Federal Regulations

COD – Chemical Oxygen Demand

Co-located Industrial Activities – Any industrial activities, excluding your primary industrial activity(ies), located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified by the SIC code list in Appendix B of the MDE General Permit No. 12-SW.

COMAR - Code of Maryland Regulations

Control Measure – refers to any BMP or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the State.

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)

Department - the Maryland Department of the Environment. Unless stated otherwise, all submissions to the Department shall be directed to the attention of the Wastewater Permits Program.

Design Manual - the updated stormwater management principles, methods and practices found in the "Maryland Stormwater Design Manual, Volumes I & II (Design Manual)", which serves as the Department's guide for stormwater management principles, methods, and practices for new development, redevelopment, retrofits and restoration. Modifications were made to the Design Manual in 2009, to include Environmental Site Design (ESD) in addition to the established Best Management Practices (BMPs). The latest edition of the Design Manual is available on the Department's Stormwater Management Program website or with this website link http://bit.ly/MDE_Design_Manual.

Discharge – when used without qualification, means the "discharge of a pollutant." See 40 CFR 122.2.

Discharge of a pollutant – any addition of any "pollutant" or combination of pollutants to "waters of this State" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of this State from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

Discharge-related activities – activities that cause, contribute to, or result in stormwater and allowable non- stormwater point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce, or prevent pollution in the discharges.

DMR – Discharge Monitoring Report

Effluent limitation - any restriction or prohibition that:

1. Is established under federal law or a law of this State;
2. Specifies quantities, rates or concentrations of chemical, physical, biological, or other constituents that are discharged into the waters of this State;
3. Includes:
   a. Parameters for the discharge of toxic and nontoxic substances, and
   b. Standards of performance for new sources.

Effluent Limitations Guideline (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

EPA – U. S. Environmental Protection Agency

EPA Approved or Established Total Maximum Daily Loads (TMDLs) – "EPA Approved TMDLs" are those that are developed by a State and approved by EPA. "EPA Established TMDLs" are those that are developed by EPA.

Existing Discharger – an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.

Facility or Activity – any NPDES "point source" (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See 40 CFR 122.2.

General permit - a State discharge permit issued for a class of dischargers.

Grab sample - an individual sample collected in less than 15 minutes. Grab samples for pH shall be analyzed within 15 minutes of sample collection.

Groundwater - underground water in a zone of saturation.

Hardness Dependent - refers to benchmark values for some metals that are determined as a function of hardness (in units of mg/L) in water. For these parameters, permittees whose discharges exceed the lowest benchmark level of the metal must determine the hardness of the receiving water (see Appendix C of the MDE General Permit No. 12-SW), to identify the benchmark value applicable to their facility.

Hazardous Materials or Hazardous Substances or Hazardous or Toxic Waste – for the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.

Impaired Water (or "**Water Quality Impaired Water**") – a body of water identified by the Department or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established. Impaired waters compilations are included in Maryland's most current List of Impaired Surface Waters as Category 4a, 4b, 4c or 5 waterbodies.

Impervious surface - any surface that does not allow stormwater to infiltrate into the ground, including any area that is paved or used for vehicular storage or traffic, building rooftops, sidewalks, driveways, etc. The surfaces considered impervious for nutrient reduction requirements are further specified in Part III.A of the permit.

Industrial Activity – the 10 categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined below and in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

Industrial Stormwater – stormwater runoff from industrial activity.

Infeasible – there is a site-specific constraint making it not technologically possible, or not economically practicable and achievable in light of best industry practices, to achieve the required control measures on-site. The burden is on the permittee to demonstrate to the permitting authority that the requirement is infeasible.

Leachate – liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

Measured flow - any method of liquid volume measurement; the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Minimize – to reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice

MGD – Million Gallons per Day

MSDS – Material Safety Data Sheet

MSGP – EPA's Multi-Sector General Permit

Municipal Separate Storm Sewer – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

1. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

2. Designed or used for collecting or conveying stormwater;

3. Which is not a combined sewer; and

4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7).

Municipal Separate Storm Sewer System (MS4) – in Maryland we have several MS4 NPDES Permits. The following are a summary of how they are broken down by size. For a full listing and explanation, visit the Department website for "Maryland's NPDES Municipal Separate Storm Sewer System (MS4) Permits" or at this link http://bit.ly/MDE_MS4.
Phase I MS4s are for large jurisdictions, which are municipalities with populations of greater than 250,000, and medium jurisdictions, which are municipalities with populations between 100,000 and 250,000. The large Phase I MS4 jurisdictions are Anne Arundel County, Baltimore County, Baltimore City, Montgomery County, and Prince George's County. The medium Phase I MS4 jurisdictions are Carroll County, Charles County, Frederick County, Harford County, and Howard County. One statewide MS4 under this category has been issued to the State Highway Administration.

Phase II MS4s include smaller jurisdictions or approximately 60 cities and towns in Maryland with populations greater than 1,000. They also include State and Federal facilities.

NetDMR – a national tool for regulated Clean Water Act permittees to submit discharge monitoring reports (DMRs) electronically via a secure Internet application to U.S. EPA through the Environmental Information Exchange Network. NetDMR allows participants to discontinue mailing in hard copy forms under 40 CFR 122.41 and 403.12.

New Discharger – a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.

New Source – any source, the construction of which is commenced after the publication by the EPA of proposed regulations prescribing a standard of performance which will be applicable to the source if the standard is promulgated.

New Source Performance Standards (NSPS) – technology-based standards for facilities that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

No exposure – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

Non-Stormwater Discharges – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, noncontact cooling water, pavement wash water, external building washdown, irrigation water, or uncontaminated ground water or spring water.

Notice of Intent (NOI) – the form (electronic or paper) required for authorization of coverage under a General Permit.

Notice of Termination (NOT) – the form (electronic or paper) required for terminating coverage under a Permit.

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NSPS – New Source Performance Standard

NTU – Nephelometric Turbidity Unit

Operator – that person or those persons with responsibility for the management and performance of each facility.

Operator – any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:

1. The entity has operational control over industrial activities, including the ability to make modifications to those activities; or

2. The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

Outfall – locations where collected and concentrated stormwater flows are discharged from the facility, including pipes, ditches, swales, and other structures that transport stormwater.

Owner - a person who has a legal interest in the facility or in the property on which the facility is located, or the owner's agent.

Permittee - the person holding a permit issued by the Department, or authorized for coverage under a general permit by the department.

Person – an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See 40 CFR 122.2.

Point source – any discernible, confined and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, large animal feeding operation, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are, or may be, discharged.

Pollutant – dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR 122.2.

Pollutant of concern – A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.

Pollution – means any contamination or other alteration of the physical, chemical, or biological properties of any waters of this State, including a change in temperature, taste, color, turbidity, or odor of the waters or the discharge or deposit of any organic matter, harmful organism, or liquid, gaseous, solid, radioactive, or other substance into any waters of this State that will render the waters harmful, or detrimental, to:

(a) Public health, safety, or welfare;

(b) Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses;

(c) Livestock, wild animals, birds; or

(d) Fish or other aquatic life.

POTW – Publicly Owned Treatment Works

Primary industrial activity – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). [For co-located activities covered by multiple SIC

codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

Proprietary Practices – Stormwater controls approved through the Department's Review Process for New Technologies as described in the Department's 2005 Proprietary Stormwater Practice Guidance titled "Facts about ….Maryland's Stormwater Program & Proprietary Practices" found on the Departments website or at this link http://bit.ly/MDE_Proprietary_Practices.

Qualified Personnel – Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at your facility, and who can also evaluate the effectiveness of control measures.

RCRA – Resource Conservation and Recovery Act

Reportable Quantity Release – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 for complete definitions and reportable quantities for which notification is required.

Restoration of Impervious Surfaces – Treatment of untreated impervious surfaces with structural or non-structural stormwater management practices based upon designs that treat the volume from one inch of rainfall. Approved practices for industrial sites are identified in Part III.A of the permit.

RQ – Reportable Quantity

Runoff - that portion of stormwater that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, and the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the State.

Runoff coefficient – the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR 122.26(b)(11).

Run-on - water from outside the industrial stormwater area that flows into the area. Run-on includes stormwater from rainfall or the melting of snow or ice that falls directly on the unit, as well as the water that drains from adjoining areas.

SARA – Superfund Amendments and Reauthorization Act

Section 313 water priority chemical - a chemical or chemical categories that: 1) are listed at 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986; 2) are present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the Clean Water Act at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

SIC – Standard Industrial Classification

Significant materials – includes, but is 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 section 101(14) of CERCLA, commonly known as Superfund; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges. See 40 CFR 122.26(b)(12).

Significant spills - includes, but is not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (40 CFR 110.10 and 40 CFR 117.21) or Section 102 of CERCLA (40 CFR 302.4).

SPCC – Spill Prevention, Control, and Countermeasures

State discharge permit - the discharge permit issued under the Environment Article, Title 9, Subtitle 3, Annotated Code of Maryland.

Stormwater – stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

Stormwater Discharges Associated with Construction Activity – a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15) .

Stormwater Discharges Associated with Industrial Activity – the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to

manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14). The term also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). See 40 CFR 122.26(b)(14).

Stormwater management – is, as described in the Design Manual, any

1. quantitative control, a system of vegetative and structural measures that control the increased volume and rate of surface runoff caused by man-made changes to the land; and
2. qualitative control, a system of vegetative, structural, and other measures that reduce or eliminate pollutants that might otherwise be carried by runoff.

Stormwater Team – the group of individuals responsible for oversight of the development and modifications of the SWPPP, and oversight of compliance with the permit requirements. The individuals on the "Stormwater Team" must be identified in the SWPPP.

Storm Event – a precipitation event that results in a measurable amount of precipitation.

Surface waters - all waters of this State which are not groundwaters.

SWPPP – Stormwater Pollution Prevention Plan

Tier 2 Waters – For antidegradation purposes, pursuant to 40 CFR 131.12(a)(2), Tier 2 waters are characterized as having water quality that exceeds the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.

Total Maximum Daily Loads (TMDLs) – A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background,

and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

Treatment of Impervious Surfaces - Implementing the requirements for stormwater management as prescribed in the Department's "2000 Maryland Stormwater Design Manual, Volumes I & II" or the Design Manual for impervious area. The manual spells out both design and implementation requirements using appropriately sized Best Management Practices or Environmental Site Design, based upon designs that manage on-site the water quality volume (WQv) resulting from the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation.

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

USGS – United States Geological Survey

Wastewater - any:
1. liquid waste substance derived from industrial, commercial, municipal, residential, agricultural, recreational, or other operations or establishments; and
2. other liquid waste substance containing liquid, gaseous or solid matter and having characteristics that will pollute any waters of the State.

Water Quality Impaired – See 'Impaired Water'

Water Quality Standards – A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. The Department as promulgated in COMAR 26.08.02 (http://www.dsd.state.md.us/comar/) and EPA adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (See CWA sections 101(a)2 and 303(c)). Water quality standards also include an antidegradation policy. See P.U.D. o. 1 of Jefferson County et al v. Wash Dept of Ecology et al, 511 US 701, 705 (1994).

Waters of the State – includes:

1. both surface and underground waters within the boundaries of this State subject to its jurisdiction, including that part of the Atlantic Ocean within the boundaries of this State, the Chesapeake Bay and its tributaries, and all ponds, lakes, rivers, streams, tidal and nontidal wetlands, public ditches, tax ditches, and public drainage systems within this State, other than those designed and used to collect, convey, or dispose of sanitary sewage; and
2. the flood plain of free-flowing waters determined by the Department of Natural Resources on the basis of the 100-year flood frequency.

WLA – Waste Load Allocation

"You" and "Your" – as used in this permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's facility or responsibilities. The use of "you" and "your" refers to a particular facility and not to all facilities operated by a particular entity. For example, "you must submit" means the permittee must submit something for that particular facility. Likewise, "all your discharges" would refer only to discharges at that one facility.

APPENDIX A

NOTICE OF INTENT

MARYLAND DEPARTMENT OF THE ENVIRONMENT

GENERAL PERMIT Number 12-SW for DISCHARGES from STORMWATER associated with INDUSTRIAL ACTIVITIES

Notice of Intent (NOI) for Permit No. 12-SW

DISCHARGE PERMIT NO. 12-SW NPDES PERMIT NO. MDR000000

Submission of this NOI constitutes notice that the party identified in Section I of this form intends to be authorized by a State/ National Pollutant Discharge Elimination System (NPDES) permit issued for discharges from stormwater associated with industrial activities identified in Section II of this form. All information requested must be provided in order to be considered for authorization to discharge under this permit. Instructions are provided at the end of this form.

SECTION I: Facility Operator Information

(A) Owner/Operator Name			
Howard County Department of Public Works			
(B) Primary Contact Name	Title		
Cynthia Brouwers	Engineering Specialist III		
Telephone Number	Email Address		
(410) 313-6447	cbrouwers@howardcountymd.gov		
(C) Mailing Address			
6715 Columbia Gateway Drive, Suite 514			
City	State	ZIP Code	
Columbia	MD	21046	
(D) IRS Employer Identification Number (EIN)	**(E)** Check Below		
52-6000965	☐ Private	☐ Federal	☑ State/Local

SECTION II: Facility Information

(F) Name of Facility			
Little Patuxent Water Reclamation Plant			
(G) Facility Address (if different than your mailing address)			
8900 Greenwood Place			
City	State	ZIP Code	County
Savage	MD	20763	Howard

(H)	*Insurance Company Name*	*Policy Number*
Worker's Compensation Insurance	See attached certificate	

Identify number of above ground storage tanks at your facility	7	Identify number of above ground storage tanks at your facility	

MARYLAND DEPARTMENT OF THE ENVIRONMENT
NOI for Permit No. 12-SW

SECTION II (continued): Facility Information

(I) Provide the primary four-digit SIC code that best represents the principal products or activities provided by the facility, and any co-located SIC codes.

Primary SIC:	Co-located SICs:	Description of your primary industrial activity:
TW	, ,	Water Reclamation Plant

(J) Latitude	Longitude	**(K)** ☐ Check here if you a new discharger.
39.1251 (in degrees decimal)	.76.81271 (in degrees decimal)	If not a new discharger, provide the previous registration (e.g., 02SW1234)

(L) Total property size 38 (in acres) | **(M)** ☐ Check if your facility is inactive and unstaffed.

(N) Identify the 8 digit identifier(s) and name(s) of the receiving water(s).
02131105 , Little Patuxent River

Identify if any of the receiving water(s) are listed as high quality (Tier 2) ☐

Identify if any of these impairments have been identified for the receiving water(s). (Category 4a, 4b, 4c, or 5 waterbodies)

☑ Bacteria	☐ Pesticides
☐ Biological	☐ pH
☐ Ions	☐ Stream Modifications
☐ Metals	☑ Sediments
☐ Nutrients	☐ Toxics
☐ PCBs	☐ Trash

Identify your local MS4 jurisdiction or N/A if your facility is not within an MS4: Howard County

SECTION III: Stormwater Pollution Prevention Plan (SWPPP) and Monitoring

The 12SW permit does require you evaluate and implement specific control measures and effluent limits. It requires you to perform quarterly visual monitoring, may include numeric limits in certain watersheds, and benchmark monitoring and reporting for specific industrial sectors. It requires you to update your SWPPP to encompass the new controls required and provide this in conjunction with your NOI, and then keep an updated SWPPP onsite.

(O) Stormwater Pollution Prevention Plan (SWPPP) Primary Contact

Name	Cynthia Brouwers	
Telephone Number	Email Address	SWPPP Provided (URL, email, etc)
(410) 313-6447	cbrouwers@howardcountymd.gov	http://howardcountymd.gov/BES.htm

(P) Select all the sector's benchmark and electronic reporting that apply to your operations.

- ☐ None
- ☐ Subsector C1 (Agricultural Chemicals for SIC 2873-2879)
- ☐ Subsector C2 (Industrial Inorganic Chemicals for SIC 2812-2819)
- ☐ Subsector C3 (Soaps, Detergents, Cosmetics and Perfumes for SIC 2841 – 2844)
- ☐ Subsector L1 –Landfill or Land Application Site with refuse disposal or marginal land permit
- ☐ Subsector L2 – Landfill or Land Application Site with refuse disposal or marginal land permit, except MSWLF Areas Closed in Accordance with 40 CFR 258.60
- ☐ Sector M - Automobile Salvage Yards
- ☐ Subsector N1 - Scrap Recycling and Waste Recycling Facility not Source-Separated Recycling
- ☐ Subsector U1 - Grain Mill Products (SIC 2041-2048)
- ☐ Subsector U2 - Fats and Oils Products (SIC 2074-2079)
- ☐ Sector AA - Fabricated Metal Products

MARYLAND DEPARTMENT OF THE ENVIRONMENT
NOI for Permit No. 12-SW

☐	(Q) Check here if your facility is subject to the Chesapeake Bay Restoration Requirements.

(R) If you are subject to Chesapeake Bay Restoration Requirements, provide these 3 values:

Total impervious surface area (square feet)	
Untreated impervious surface area (in square feet)	
Impervious surface area subject to 20% restoration requirement (in acres)	

SECTION IV: Permit Fee Selection

Annual Payment – Select this fee structure if you prefer to pay annually. The first $120 annual payment shall be submitted with this NOI and then paid annually by July 1 thereafter.	$120	☐
One-Time Payment – Select this fee structure if you prefer to pay one-time for the term of the permit (until December 31, 2018). Additional annual fees may apply after that time, if the permit is administratively extended. Send check for this amount with this completed NOI.	$550	☐
Select this if you are State or Local Government.	No Fee	☑

SECTION V: Certification

To be completed by a responsible corporate officer, proprietor, general partner, principal executive officer, or ranking elected official or their duly authorized representative, as detailed in Part II.C of the permit.

The permit has specific control measure selection and implementation requirements. The permit has quarterly benchmark and visual monitoring requirements. The permit requires you to perform annual Comprehensive Site Compliance Evaluations, and to document the results with your SWPPP. The permit has triggers and requirements for corrective actions. You should be aware of these and other requirements by thoroughly reviewing the permit.

"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 gather and evaluate 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/Certifier	Date
	6/27/14

Signatory Name/Title: Typed or Printed	Telephone Number
Mark DeLuca / Dep. Dir, DPW and Chief, Bureau of Envr. Services	410 313-4414

NOI Preparer (Complete if NOI was prepared by someone other than the certifier)

Prepared by:	Samantha Lemaster
Telephone Number	Email Address
(410) 584-7000	slemaster@eaest.com

Submit completed form along with FEE (payable to Maryland Department of the Environment) to:

Maryland Department of the Environment, P.O. Box 2057, Baltimore, MD 21203-2057

For MDE use only:	Facility #	Receipt #	Date:
PCA 13710	Comp Object 5707	Suffix 406	

Form Number: MDE/WMA/PER.004
Revision Date: March 14, 2014
TTY Users 1-800-735-2258

MARYLAND DEPARTMENT OF THE ENVIRONMENT
NOI for Permit No. 12-SW, NPDES PERMIT NO. MDR0000
FORM INSTRUCTIONS

WHO MUST FILE

The operator of a facility that is requesting to discharge stormwater from industrial facilities must submit a Notice of Intent (NOI) to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Discharge Permit No. 12-SW. If you have a question about whether you need this permit or any NPDES permit, contact the Maryland Department of the Environment (MDE), Wastewater Permits Program, at 410-537-3323.

Submission of this NOI constitutes notice that the party identified in Section I of this form intends to be authorized by a State/ NPDES permit issued for stormwater discharges from industrial facilities identified in Section II of this form. Authorization to discharge begins upon notification of registration by MDE. The permit is available using this link http://bit.ly/MDE_industrial_stormwater or via MDE's website.

SECTION I: Owner/Operator Information

(A) Provide the legal name of the person, firm, public organization, or other entity that operates the industrial facility described in Section II of this application. An operator of a facility is a legal entity that controls the operation of the facility.

(B) Provide the name of the Primary Contact; title of Primary Contact; Primary Contact phone number; Primary Contact e-mail address.

(C) Provide the primary facility contact mailing address; city; state; zip. All correspondence will be sent to this address.

(D) Provide the IRS Employer Identification Number (EIN).

(E) Identify whether the owner/operator is private, federal or state/local government.

SECTION II: Facility Information

(F) Provide the name of facility – enter "same" if the name does not differ from the information in Section I(A).

(G) Provide the physical address; city; state; zip – enter "same" if the address does not differ from the information in Section I(C); Provide the County where the facility is located. If this is a contiguous system spanning multiple counties or cities, list all counties and cities. We now request above ground storage tank information (added 2/21/14).

(H) Provide worker's compensation insurance information for the facility identified in this section of the application.

(I) Provide the primary and any co-located four-digit Standard Industrial Classification (SIC) code describing the facility. Also provide a short written explanation of the industrial process category (e.g., scrap recycling of automobiles). The current Department of Labor's - Occupation, Safety and Health Administration (OSHA) website (http://www.osha.gov/pls/imis/sicsearch.html) provides a detailed written description of SIC codes.

(J) Provide latitude and longitude of the discharge/outfalls requesting to be permitted. To obtain coordinates, you may use a GPS to find location within your site. There are internet options that you can also use, such as Google's Tool. A step by step method can be found at this URL: http://www.wikihow.com/Find-the-GPS-Coordinates-of-an-Address-Using-Google-Maps. We require the coordinates be in degrees decimal. An example of this for Maryland Department of the Environment at 1800 Washington Blvd, Baltimore, MD would be latitude of 39.276027, longitude of -76.644779.

(K) Identify if you are a new discharger, or previously covered under another permit. Identify any previously obtained NPDES permit (general or individual) for your stormwater discharges. If applicable, include the permit number. (e.g., 02SW1234 general permit or 11DP1234

individual permit, where 1234 was the unique 4 digit designation for your coverage).

(L) Provide the total property size at the address, including both the industrial and non-industrial portions of your property (e.g., 2 acres).

(M) Indicate whether your facility is currently inactive and unstaffed (Part V.A.4 of the permit). Note that if your facility becomes inactive and unstaffed during the permit term, you must notify the Department immediately.

(N) This section is to verify information about where the stormwater is discharged. Identify the name(s) and 8 digit identifier of the receiving stream or water (e.g., Gwynns Falls 02130905), using the Department's "FindMyWatershed" tool at this link http://bit.ly/FindWatershed. When using they "FindMyWatershed" tool type in your address, and then place your mouse at your discharge points and left-click to bring up the identifier and receiving water.

To verify if the receiving waters are designated as high quality waters, use the Department's "Tier 2" tools at this link http://bit.ly/MDE_Tier2 to locate your facility location and identify if the stream or catchment are categorized as Tier 2. The "Tier 2" tools have shaded areas that indicate where waters are designated as high quality or Tier 2 waters.

To verify if receiving waters are impaired (Category 4a, 4b, 4c, or 5 water bodies), use the Departments "Integrated Report Water Quality Assessment Maps" at this link http://bit.ly/MDE_Impairments and review each of the impairments provided on that website (bacteria, biological, ions, metals, nutrients, PCBs, pesticides, pH, stream modifications, sediments, toxics or trash) for your facility location. When looking at each of the maps (i.e. Bacteria), you can use the Legend Button on the upper right side of the map to identify what each color or shading means. If the stream or receiving water which receives your stormwater is listed as impaired, indicate this impairment on the NOI. An alternative method is provided through Maryland's Searchable Integrated Report Database available at http://bit.ly/MDE_SearchableReport.

If your facility discharges to a municipal storm sewer system (MS4), you are required to contact the jurisdiction. Local storm sewer systems under NPDES permits are listed at: http://bit.ly/MDE_MS4. If you are uncertain of the MS4 operator, contact your local government department of public works for that information.

SECTION III: Stormwater Pollution Prevention Plan (SWPPP) and Monitoring

(O) Indicate here the main contact for the SWPPP. Also, indicate how you are providing your SWPPP to the Department, either online with appropriate URL (provide your URL in the space on the form), by email, or other methods provided in the permit. Identify the name, telephone number, and email address of the person who will serve as a contact for the Department on issues related to stormwater management at your facility. This person should be able to answer questions related to stormwater discharges, the SWPPP and other issues related to stormwater permit coverage, or have immediate access to individuals with that knowledge.

(P) Determine which industrial sectors apply to your operations by first identifying you industrial sectors in Appendix A, and then reviewing Appendix D for applicable benchmark requirements. Verify from this list which ones apply to your facility. If these apply to your facility you will need to apply for access to NetDMR, and begin monitoring (Part V.B of the permit).

(Q) Confirm if your facility is subject to the Chesapeake Bay Restoration Requirements (see below). You must comply with the Chesapeake Bay Restoration Requirements (Part III.A of the permit) if you meet ALL of these criteria: your facility is within the Chesapeake Bay Watershed; your facility is 5 acres or greater in size; any portion of your facility is located

within a Phase I or Phase II municipal separate storm sewer system (MS4) jurisdiction; and your facility is not owned by or leased from an entity that is permitted as an MS4.

To determine if your property is in the Chesapeake Bay Watershed, you can use the results from your assessment above or using the Department's "FindMyWatershed" tool at this link http://bit.ly/FindWatershed. Although most of the state is in the Chesapeake Bay Watershed, there are exceptions on the western and eastern sides of the state. The exceptions in western Maryland are those that drain to the Youghiogheny River (eight digit codes 05020201 and 05020202), including Deep Creek Lake (05020203), and areas that drain to the Casselman River (05020204). The exceptions in eastern Maryland are areas that drain to the Christina River (02130607), Isle of Wight Bay (02130103), Assawoman Bay (02130102), Newport Bay (02130105), Chincoteague Bay (02130106), or Sinepuxent Bay (02130104) and areas that drain directly to the Atlantic Ocean (02130101).

Whether you are within the MS4 jurisdiction (e.g. it is located in Frederick County) can be verified by contacting your local government or the Department if you are unsure.

Facilities owned by or leased from an entity that is permitted as an MS4 will perform restoration through the MS4 permit and are therefore not required to do additional work under this permit.

(R) These three values are part of the calculations required in the permit, for those who are subject to the Chesapeake Bay Restoration Requirements.

Total impervious surface area in square feet is determined in the permit Part III.A.2.a.

Untreated impervious surface area in square feet is determined in the permit Part III.A.2.d.

Impervious surface area subject to 20% restoration requirement in acres is determined in the Part III.A.2.e.

SECTION IV: Permit Fee

Indicate the amount sent with this NOI form. The permit fee for stormwater discharges associated with industrial activity is $120 per year if submitted with the NOI and then annually on July 1st thereafter. Alternatively, an upfront payment of $550 (until December 31, 2018) would be an option with additional annual fees which may apply after that time, if the permit is administratively extended. The fee shall be submitted with the NOI. Local and State Government are exempt from the fee. The annual rate and application fee may change over time, so you are encouraged to check COMAR 26.08.04.09-1 (C) at the time of your application.

SECTION V: Certification

Signatures and Certifications are detailed in the permit Part II.C. Individuals who discharge to waters of the State without an individual State or general State/NPDES discharge permit, are in violation of the Federal Clean Water Act and of the Environment Article, Annotated Code of Maryland, and may be subject to penalties. An original signature and date is required.

A completed form will not be processed until the fee has been paid-in-full and your SWPPP has been received.

HOW TO SUBMIT:

Send the completed NOI and fee (see permit) to **Maryland Department of the Environment, P.O. Box 2057, Baltimore, MD 21203-2057** and provide the SWPPP in one of the allowed formats (Part II.A.3.b of the permit). You must ensure that the form is completely filled out and payment is enclosed, and the SWPPP follows all permit requirements and is successfully provided to the Department. Your

permit application will be handled as efficiently as possible. However, if you fail to provide us with the information we request, we will be unable to process your registration for the permit.

STATE OF MARYLAND
WORKERS' COMPENSATION COMMISSION
6 North Liberty Street
Baltimore, MD 21201-3785

CERTIFICATE OF COMPLIANCE

STATE OF MARYLAND)
) To Wit:
CITY OF BALTIMORE)

This is to certify that **Howard County Government** is an approved self-insurer in the State of Maryland and has acquired excess insurance covering catastrophic losses, and has deposited with the Maryland Workers' Compensation Commission security guaranteeing its payment of workers' compensation benefits in the State of Maryland. It is further certified that this information is taken from the records of the Workers' Compensation Commission of Maryland.

IN WITNESS WHEREOF, I hereunto subscribe my name and affix the seal of the Maryland Workers' Compensation Commission at Baltimore City this 15th day of June, 2008.

WORKERS' COMPENSATION COMMISSION
OF THE STATE OF MARYLAND

By: Diana F. Farrell
Diana F. Farrell
Director of Self-Insurance

APPENDIX B

MDE GENERAL DISCHARGE PERMIT 12-SW

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard ● Baltimore Maryland 21230
(410) 537-3000 ● 1-800-633-6101 ● http://www.mde.maryland.gov

Martin O'Malley
Governor

Robert M. Summers, Ph.D
Secretary

Anthony G. Brown
Lieutenant Governor

GENERAL PERMIT FOR DISCHARGES FROM STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

DISCHARGE PERMIT NO. 12-SW NPDES PERMIT NO. MDR0000

Effective Date: January 1, 2014 **Expiration Date:** December 31, 2018

APPENDICIES

You are only permitted to discharge under this permit after notifying and getting approval from the Department.

PART I. APPLICABILITY

By this permit the Maryland Department of the Environment (the Department) authorizes the discharge of stormwater associated with industrial activity to waters of the state. This authorization is only for operators located in the state of Maryland, who have submitted a notice of intent (NOI) and received written approval from the Department to discharge in accordance with the eligibility requirements and other conditions in this permit and consistent with your NOI, as on file with the Department. This authorization is pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and the provisions of the Federal Clean Water Act (CWA), 33 U.S.C. §1251 *et seq.* and implementing regulations 40 CFR Parts 122, 123, 124, and 125. "You" and "Your" are used in this permit to refer to the permittee or the permit applicant, as the context indicates, and that party's facility or responsibilities.

A. Geographic Coverage

This permit applies to facilities operating within the state of Maryland.

B. Facilities Covered

To be eligible to discharge under this permit you must either (1) have been covered under previous permit 02-SW or (2) have a stormwater discharge associated with industrial activity, as defined in Appendix E, from a primary industrial activity included in Appendix A or (3) be notified by the Department that you are eligible for coverage under Sector AD: Non-Classified Facilities, as defined in Appendix A or (4) be notified by the Department that you are eligible for coverage as described in Part I.E.4.

C. Limitations on Coverage

The following stormwater discharges are not eligible for coverage under this permit. Additional limitations on coverage for each sector covered under this permit are listed in Appendix D. You must determine which sector(s) your industrial activities are defined as in Appendix A to determine which additional limitations from Appendix D apply.

1. Stormwater discharges associated with construction activity, as defined in Appendix E and 40 CFR 122.26;

2. Stormwater discharges subject to effluent limitations guidelines (see Part I.G.2);

3. Stormwater discharges that are mixed with non-stormwater, other than those non-stormwater discharges listed in Part I.E.3;

4. Stormwater discharges containing the following toxic pollutants, which are limited by effluent standards in 40 CFR Subchapter D Part 129: Aldrin/Dieldrin, DDT, Endrin, Toxaphene, Benzidine, or Polychlorinated Biphenyls (PCBs);

5. Stormwater discharges for which a National Pollutant Discharge Elimination System (NPDES) permit has been terminated (other than at your request) or denied, or those for which the Department requires an individual permit to address stormwater discharges or an alternative general permit (Part I.G.2.b);

6. New discharger discharging to water quality "impaired waters," as defined in Appendix E, are not eligible for coverage under this permit unless you:

- **a.** prevent all exposure to stormwater of the pollutant(s) for which the waterbody is impaired, and retain documentation of procedures taken to prevent exposure onsite with your SWPPP; or
- **b.** document that the pollutant(s) for which the waterbody is impaired is not present at your site,

and retain documentation of this finding with your SWPPP; or

c. in advance of submitting your NOI, provide to the Department data to support a showing that the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retain such data onsite with your SWPPP. To do this, you must provide data and other technical information to the Department sufficient to demonstrate:

i.) For discharges to waters without a EPA approved or established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; or

ii.) For discharges to waters with an EPA approved or established TMDL, that there are sufficient remaining wasteload allocations in an EPA approved or established TMDL to allow your discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

You are eligible to discharge to impaired waters if you receive an affirmative determination from the Department that your discharge will not contribute to the existing impairment, in which case you must maintain such determination onsite with your SWPPP.

D. Prohibited Stormwater Discharges

If you are covered under this permit, a stormwater discharge to waters of the State that contributes to a violation of a water quality standard is a permit violation and subject to corrective actions (see Part IV).

E. Eligible Discharges

Unless otherwise ineligible under Part I.C, the following discharges may be covered under this permit:

1. Stormwater discharges associated with industrial activity for any primary industrial activities and co-located industrial activities if that activity is listed in Appendix A, or discharges previously covered under permit 02-SW;

2. Industrial stormwater discharges per the Department's discretion under Sector AD in Appendix A, which includes established Sector AD.a and Sector AD.b, or on a site specific basis as determined by the Department;

3. Non-stormwater discharges from:

a. water used to fight active fires (*not from fire system cleaning or testing),*

b. pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);

c. landscape watering, only if all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;

d. routine external building wash down that does not use detergents and any dislodged paint chips are filtered;

e. uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;

f. irrigation drainage;

g. uncontaminated ground water or spring water;

h. foundation or footing drains where flows are not contaminated with process materials; and

i. incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdown or drains).

4. Stormwater discharges under a separate individual or general permit (except MS4) may also

obtain limited coverage under this permit specific to Part III.A "Chesapeake Bay Restoration Requirements" in lieu of the Department modifying or issuing a separate permit that would otherwise implement requirements equivalent to those in Part.III.A.

F. No Exposure Certification

If you are eligible for coverage by this permit, and meet the requirements for a no exposure exclusion from permitting under 40 CFR 122.26(g), you may file a No Exposure Certification. Upon written notice from the Department that you have met the requirements, you are no longer required to have a permit.

- To qualify for this certification, you must first verify that there is no potential for the stormwater discharged from your facility to waters of the State to be exposed to pollutants in accordance with the criteria established by the Department on form MDE/WMA/PER.067 (found on MDE's website at http://www.mde.state.md.us/ or at the link http://bit.ly/MDE_NEC).
- You shall also obtain written certification by either a Professional Engineer, a Certified Professional in Storm Water Quality (CPSWQ), a Registered Architect, or a Landscape Architect that you meet the requirements of no exposure.
- If you qualify, you will submit the completed and appropriately signed form to the Department, along with the required written certification according to the deadlines of this permit (Part II.B).
- The exemption is non-transferable and is only valid while this permit is in effect at which point a new exemption is required. However you must submit a No Exposure Certification to the Department at least once every five years.
- You must notify the Municipal Separate Storm Sewer System (MS4) if your facility is exempted from obtaining an NPDES permit for stormwater associated with industrial activity. This exemption does not preclude the MS4 authority from imposing requirements for restoration of impervious surfaces at the facility.

G. Alternative Permit Coverage

The Department may require you to obtain, or you may also request, an individual permit or coverage under another general permit as described below, even though you may be eligible for coverage under this permit. If the Department requires you to apply for and obtain an alternative permit and you do not apply as required, the Department may terminate your coverage under this permit. This termination is effective at the end of the day that the Department specified for the application or Notice of Intent (NOI) to be submitted, after which you must cease discharges that were covered by this permit.

1. If the Department determines that a discharge may cause water quality standards to be exceeded in the receiving water, then the Department may require you to take additional actions. You may be required to obtain an individual NPDES discharge permit or coverage under another general permit. The Department may process an NOI as an application for an individual permit if site specific conditions do not allow the facility to be covered under the general permit without compromising water quality. This could occur if, for example, a permittee proposes to discharge to impaired waters, with or without an existing Total Daily Maximum Load (TMDL), or for discharges to high quality waters.

2. If any stormwater discharges at your facility are subject to effluent limitations guidelines or new source performance standards under 40 CFR Subchapter N, then you must apply for an individual NPDES permit or coverage under an industry-specific general permit for those stormwater discharges. This permit may cover parts of your facilities not covered by effluent limitation guidelines or new source performance standards.

a. Certain stormwater discharges from the following industries are subject to effluent limitation guidelines and are therefore not covered by this permit:

40 CFR 411 – Cement Manufacturing	40 CFR 418 – Fertilizer Manufacturing

40 CFR 419 – Petroleum Refining	40 CFR 423 – Steam Electric Power Generating
40 CFR 429 – Timber Products Processing	40 CFR 440 – Ore Mining and Dressing
40 CFR 443 – Paving and Roofing Material (tars & asphalt)	40 CFR 445 – Landfills

For a complete list of current effluent guidelines by industry, see the indicated 40 CFR part on the Environmental Protection Agency's (EPA) website for Industrial Regulations (*http://www.epa.gov/waterscience/guide/industry.html*). If your industry is included in this list then you should review the applicable 40 CFR part to determine if you are subject to effluent limitation guidelines for stormwater.

b. If the Department has issued an industry-specific general permit addressing stormwater and wastewater discharges from your industrial activity, you should apply for coverage (including stormwater) under that permit. Currently, those specific permits are:

i.) General Discharge Permit For Discharges from Mineral Quarries, Borrow Pits, and Concrete and Asphalt Plants: (General Permit No. 10-MM or replacement),

ii.) General Permit for Discharges from Surface Coal Mines and Related Facilities: (General Discharge Permit No. 06-CM or replacement),

iii.) General Permit for Discharges from Marinas including Boat Yards and Yacht Basins (Maryland General Permit No. 10-MA or replacement), and

iv.) General Discharge Permit for Animal Feeding Operations (General Permit No. 09-AF/MDG01 or replacement).

3. You may request to be excluded from coverage under this permit by applying for an individual state or NPDES discharge permit or submitting an NOI for coverage under another general permit. The Department may grant your request if the Department determines your reasons are adequate. If you are issued an individual NPDES permit or apply for coverage under an industry-specific general permit, the Department may terminate your coverage under this permit.

H. Continuation of an Expired General Permit

Unless your permit or authorization is revoked or terminated by the Department, or you are required to and fail to provide control measure verification (Part III.A.3.b), the terms and conditions of this permit and its authorized dischargers are automatically continued and remain fully effective and enforceable upon expiration of this permit until the date(s) specified under a reissued general permit.

PART II. AUTHORIZATION UNDER THIS PERMIT

A. How to Obtain Authorization

If you are eligible for coverage under this permit, per PART I, to obtain authorization you must

• Select, design, install, and implement control measures in accordance with Part III.A and Part III.B to meet numeric and non-numeric effluent limits;

• Submit a complete and accurate Notice of Intent (NOI) or Permit Transfer Request with Permit Fee as indicated below; and

• Develop and submit to the Department, a Stormwater Pollution Prevention Plan (SWPPP) according to the requirements in Part III.C and, where applicable, Part III.A.2 of this permit.

Based on a review of your NOI or Transfer Request, the Department may delay your authorization for further review, notify you that additional effluent limitations are necessary, or deny coverage under this permit and require submission of an application for an individual NPDES permit. In these instances, the Department will notify you in writing of the delay, of the need for additional effluent limits, or of the request for submission of an individual NPDES permit application.

Provides discharge authorization only upon Maryland Department of the Environment notification of registration.

1. Notice of Intent (NOI) and Transfer Requests

a. Notice of Intent (NOI)

You must complete all information required on this permit's corresponding NOI form (MDE-WMA-PER004), or an equivalent electronic form provided by the Department. Detailed instructions are included on the NOI form. If you operate multiple facilities you must submit an NOI for each noncontiguous site.

You are required to provide the following information on the appropriate NOI form.

- Facility Operator Information including your name, mailing address, email address, telephone number, IRS Employer Identification Number (EIN) and Worker's Comp Insurance company and policy.
- Facility Information including the facility location, including physical address and coordinates in degrees decimal; the primary and any subsequent co-located Standard Industrial Classification (SIC) codes relevant to this permit, verification if this is a new discharger or if there is any preexisting NPDES permit number for stormwater coverage, the total acres of property at that address and whether the facility is presently inactive and unstaffed.
- Information on the receiving waters of the industrial stormwater. Identify the receiving water body(s) and 8 digit identifier for your discharges, including whether they qualify as high quality Tier 2, and identification of any impairments. Specify the MS4 jurisdiction you operate in.
- Identify who has prepared the Stormwater Pollution Prevention Plan (SWPPP), including email and phone number, along with how you have provided the SWPPP to the Department.
- Identify if your facility is subject to the Chesapeake Bay Restoration requirements, quantifying the total impervious surface area (square feet), the untreated impervious surface area (in square feet) and the impervious surface area subject to 20% restoration requirement (in acres).
- Identify which industry sector benchmarks apply to the operation.
- Selection of either annual payments, or an upfront payment for 5 years and annual payments thereafter, or if you are exempt.
- Provide the signatory name, title and contact information and space for the actual signature. Provide the NOI preparer information, including phone number and email address.

b. Transfer of Authorization.

For transfer of ownership, you can complete the Permit Transfer Request Form for General NPDES Permits referred to as MDE/WMA/PER.079 found on the Department's website or at http://bit.ly/MDE_Transfer_Request. Detailed instructions are included with the form. If you operate multiple facilities you must submit a Transfer Request for each noncontiguous site. The authorization under this permit is not transferable to any person except in accordance with this section. Authorization to discharge under this permit may be transferred to another person if:

- The current permittee notifies the Department in writing of the proposed transfer.
- A written agreement, indicating the specific date of the proposed transfer of permit coverage and acknowledging the responsibilities of the current and new permittee for compliance with the terms and conditions of this permit, is submitted to the Department.
- The new permittee either confirms in writing that the type of discharge, number of outfalls, and other information given on the original NOI remain correct or updates this information.
- The new permittee confirms in writing that either they will follow the existing stormwater pollution prevention plan or that they have developed a new plan.

- Neither the current permittee nor the new permittee receives notification from the Department, within 30 days of receipt of items above, of intent to terminate coverage under this permit.

2. Permit Fee

a. You must submit the initial permit fee to the Department with the NOI form for the fee in effect at the time that the payment is due as specified in COMAR 26.08.04.09-1(C)(1)(a).

b. Make the initial fee payable to the Maryland Department of the Environment and send it together with the completed NOI to:

Maryland Department of the Environment
P.O. Box 2057
Baltimore, MD 21203-2057

c. If you pay the NOI fee by a check that does not clear for any reason, you will have 30 calendar days to make proper payment, including any interest and other charges. If payment is not received by the 31st calendar day, your coverage under this permit must be considered void from the outset. You should save the cancelled check, a copy of the completed NOI, and the letter confirming your authorization from the Department. These documents must be provided to the Department upon request.

d. A new owner of a facility as a result of a transfer of ownership is responsible for any fees unpaid by the former owner.

3. SWPPP

Proper formats for submitting your SWPPP are provided below.

a. You should not include any confidential information in your submitted SWPPP, which will be a public document available for review by the public.

b. You must submit an electronic copy of the SWPPP to the Department and have a hard copy available onsite. Your electronic copy (PDF, JPEG or Word) of the SWPPP must be provided to the Department by one of these methods.

i.) Including a file on electronic media (CD, DVD, USB drive, or other approved media) along with your mailed copy of the NOI.

ii.) Emailing the file to swppp.permit@maryland.gov when you send your NOI to the Department. The email cannot exceed 25 MB and so you may need to use more than one email to deliver the entire file. The email subject line should include "12SW", your previous registration number (if you did have previous coverage under 02SW) and your facility name.

iii.) Posting a copy of the SWPPP using your NetDMR account when you send your NOI to the Department.

iv.) Providing the Department a link (URL) to your document on your NOI, which provides access to your SWPPP on a publicly available company website.

v.) Other electronic means that you make accessible to the Department such as a link to DropBox, Google Drive, SkyDrive, etc.

B. Deadlines for Coverage

You will be in violation of state and federal requirements to obtain a permit and subject to enforcement action by the Department if you fail to submit a i) No Exposure Certification, or ii) an NOI, SWPPP and fee payment or iii) transfer request in a timely manner as provided in the following table. Late NOIs will be accepted, but authorization to discharge will not be retroactive.

Category	Coverage Submittal Deadline
Existing Dischargers – in operation as of Jan 2014 and previously authorized for coverage under 02-SW, that are not	Within 6 months after the effective date of this permit. Authorization to discharge under 02-SW continues in the interim.

subject to Chesapeake Bay Restoration Requirements (Part III.A).	
Existing Dischargers – in operation as of Jan 2014 and previously authorized for coverage under 02-SW that are subject to Chesapeake Bay Restoration Requirements (Part III.A).	Within 1 year after the effective date of this permit. Authorization to discharge under 02-SW continues in the interim.
New Dischargers or New Sources	A minimum of 60 days prior to commencing discharge.
New Owner/Operator of Existing Discharger - transfer of ownership and/or operation of a facility whose discharge is authorized under this permit	A minimum of 30 days prior to date that the transfer will take place to the new owner/operator.
Other Eligible Dischargers – in operation prior to permit effective date, but not covered under the 02-SW or another NPDES permit.	Immediately, to minimize the time discharges from the facility will continue to be unauthorized.

C. Required Signatures

1. Certification

Any person signing documents in accordance with part II.C.2 and II.C.3 above must include the following 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 gather and evaluate 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."

2. All applications, including NOIs, transfer requests, and No Exposure Certifications must be signed by a Signatory as follows:

a. *For a corporation*: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

i.) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

ii.) the manager of one or more properties belonging to the owner, provided the manager is authorized to make management decisions which govern the operation of the regulated facility having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

b. *For a partnership or sole proprietorship:* By a general partner or the proprietor, respectively; or

c. *For a municipality, State, Federal, or other public agency:* By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

i.) the chief executive officer of the agency; or

ii.) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of the EPA).

3. Your SWPPP, including changes to your SWPPP to document any corrective actions taken as required by Part IV, and all reports submitted to the Department, must be signed by a person described in Part II.C.2 above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. the authorization is made in writing by a Signatory;

b. the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

c. the signed and dated written authorization is included in the SWPPP and made available to the Department upon request.

4. If an authorization for a representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of PART II.C.3 must be submitted to the Department prior to submitting or with any reports, information or applications that must be signed by a duly authorized representative.

D. Failure to Notify

If you (1) engage in an activity covered under this permit, (2) fail to notify the Department of your intent (Part II.A) to be covered under this permit within the deadlines established in this permit (Part II.B) , and (3) discharge to waters of the state without an individual NPDES discharge permit, then you are in violation of the Federal Clean Water Act and of the Environment Article, Annotated Code of Maryland, and may be subject to penalties.

E. Additional Notification

If stormwater from your facility discharges into a Municipal Separate Storm Sewer System (MS4) you must notify the MS4 that you are registered under this permit if the system is regulated by a NPDES permit. If the MS4 notifies you of additional requirements that you must meet to discharge into that system then you must comply with those requirements to stay eligible for this permit.

F. Changes in Permit Coverage

Certain planned changes in stormwater discharge or termination of permit coverage, both described below in this section, require notification to the Department's Water Permits Program at this address:

Maryland Department of the Environment
Wastewater Permits Program
1800 Washington Blvd, Ste 455
Baltimore, MD 21230

1. Planned Changes

You must give written notice to Department's Water Permits Program as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).

2. Termination of Permit Coverage

a. Submitting a Notice of Termination
To terminate permit coverage, you must submit a complete and accurate Notice of Termination (NOT) http://www.mde.maryland.gov/assets/document/permit/MDE-WMA-PER005.pdf to the Water Permits Program. Your authorization to discharge under this permit terminates at midnight of the day that a complete Notice of Termination is processed and acknowledged by the Department. If you submit a Notice of Termination without meeting one or more of the conditions identified in Part I.H.2, then your Notice of Termination is not valid. You are responsible for meeting the terms of this permit until your authorization is terminated.

b. When to Submit a Notice of Termination
You must submit a Notice of Termination within 30 days after one or more of the following conditions have been met:

i.) All operations at your facility have permanently ceased and there will be no further exposure of stormwater to any industrial activity, process, material or transport at the facility , and you have already implemented necessary sediment and erosion controls as required by Part III.B.1.b.v; or

ii.) You move your operation to a new location (After submitting an NOT you must then apply for coverage at the new location per Part II.); or

iii.) A new owner or operator has taken over responsibility for the facility; or

iv.) You have obtained coverage under an individual or alternative general permit for all discharges required to be covered by an NPDES permit, unless the Department has required that you obtain such coverage under Part I.E.4, in which case coverage under this permit will terminate automatically.

c. The Department may terminate your coverage under this general permit if the Department finds good cause to do so.

PART III. STORMWATER MANAGEMENT REQUIREMENTS

A. Chesapeake Bay Restoration Requirements

You must comply with the requirements in this section if you meet ALL of these criteria:

- your facility is within the Chesapeake Bay Watershed;
- your facility is 5 acres or greater in size;
- any portion of your facility is located within a Phase I or Phase II municipal separate storm sewer system (MS4) jurisdiction; and
- your facility is not owned by or leased from an entity that is permitted as an MS4.

1. Control Measures for Nutrient Reduction

a. You must select, design, install and implement restoration of 20% of the untreated impervious surface area at your facility or equivalent control measures for the reduction of nutrients.

i.) Restoration of impervious surfaces and allowed equivalent control measures are defined in paragraph “c” below.

ii.) “Untreated” means not meeting the definition of treatment in Appendix E, "Treatment of Impervious Surfaces." The amount of required restoration is determined from the impervious areas within your permitted industrial area as defined in paragraph “b” below. However the control measures may be implemented outside this industrial area, including but not limited to restoration of parking lots within your entire facility, or projects offsite in coordination with your local stormwater authority as described in paragraphs “c” or “d” below.

iii.) The control measures must be fully implemented within the time frame described in

paragraph "e" below and must be consistent with other MDE policies as described in paragraphs "f" and "g" below.

b. The total area of untreated impervious surfaces that existed at your facility on January 1, 2006, as determined to the best of your ability, shall be your baseline for determining the applicable amount of control measures. For the purposes of this permit requirement, impervious surfaces are those surfaces that do not allow stormwater to infiltrate into the ground and may include any driveway, road or parking lot that is paved (concrete, asphalt) or used for vehicular storage or traffic, any building or storage facility rooftop, any water resistant material covers, any sidewalks/paths, any decks, any paved storage areas, any tanks or containment structures or any surfaces that are paved or covered for other reasons. These impervious surfaces also must collect or convey stormwater discharges associated with industrial activity (as defined in Appendix E "Stormwater Discharges Associated with Industrial Activity"), for your primary industrial or co-located industrial activities at your facility.

c. Control measures must be designed and implemented using any combination of the following three methods. Any treatment of impervious surfaces added since January 1, 2006 may be counted towards meeting the 20% requirement.

i.) Practices found in the Design Manual (as defined in Appendix E, "Design Manual"), or other Proprietary Practices (as defined in Appendix E, "Proprietary Practices") approved by the Department. Restoration of impervious surfaces is defined as the treatment of untreated impervious surfaces with structural or non-structural stormwater management practices using structural best management practices (BMPs) found in the Design Manual, or through other Proprietary Practices approved by the Department, based upon designs that treat the volume from one inch of rainfall. Successful implementation of these structural BMPs in the industrial environment also requires some flexibility to accommodate site specific conditions. Restoration opportunities should be pursued where they make sense and where engineering adjustments allow for the successful functioning of any BMP used. The sources of pollutants that may impede the practices may require specific consideration such as pretreatment.

ii.) Practices found in the Accounting Guidance (as defined in Appendix E, "Accounting Guidance"). This nutrient accounting guidance provides several approved equivalent controls used by municipalities ranging from street sweeping to septic system upgrades, which can be considered by industrial facilities. In addition, this guidance addresses situations where site constraints prevent the capture of the full one inch or Water Quality Volume (WQv) treatment, and in these situations the impervious area considered as treated shall be pro-rated based on the total volume treated. The total impervious surface area draining to a BMP may be considered treated when the full WQv is provided for one inch of rainfall; otherwise, proportional treatment will be granted based on the percentage of the WQv captured. For example, if only a half inch of rainfall is treated, then only one half of the impervious surface area in the drainage area shall be considered treated.

iii.) Other equivalent control measures. Measures that achieve reduction of 5.4 lbs total nitrogen (TN) per year shall be considered equivalent to restoration of one acre of impervious surface area. The equivalent measures may include any of these options.

- New controls required by this permit for erosion and sediment control, or for reduced use of fertilizer. Refer to EPA Chesapeake Bay Program Office Phase 5.3 Community Watershed Model, dated December 2010, for guidance on evaluating reductions. This is referred to by document number "EPA 903S10002 - CBP/TRS-303-10" and can be found at the website "http://ches.communitymodeling.org/models/CBPhase5/documentation.php". New erosion and sediment control reduction efficiencies are found in this document under "6.7.3 Erosion and Sediment Control" and reduced use of fertilizer load reductions are found under "6.7.10 Urban Nutrient Management".

- New controls to achieve the benchmarks for nitrogen required by this permit, if benchmarks are applicable for your facility. The control design and resulting TN reductions must be fully documented and approved by the Department.
- Reducing an existing TN load allocation under an individual NPDES permit, issued to the permittee.

d. You must implement these control measures (Part III.A.1.b) at your facility unless infeasible (as defined in Appendix E, "Infeasible"). If it is infeasible to implement any or all of these practices at your facility, you may satisfy the restoration requirement by working through your local jurisdiction to implement project(s) offsite.

e. For facilities that were registered for coverage under the 02-SW, the control measures must be implemented within five (5) years of the permit effective date. For all other permittees, the control measures must be implemented within four (4) years from the date you file an NOI, and this deadline will continue into the next General Permit issued by the State if the General Permit renewal occurs prior to your implementation deadline.

f. The reduction of nutrients associated with compliance with the 20% restoration requirement shall not generate any marketable credits. Reductions beyond the requirements in this permit may be eligible as marketable credits consistent with any current MDE trading policy, and would satisfy a restoration requirement of the next General Permit issued by the State.

g. This requirement must be implemented in a manner that is consistent with any other permits, schedules or requirements by the Department for the control or mitigation of pollutants at the site.

2. Nutrient Control Measure Planning and SWPPP Documentation

For those facilities that were entirely developed or entirely redeveloped after 2002, such that all impervious surfaces have been treated with stormwater BMPs in the Design Manual, you must complete only step “a” and step “b” below and document the results in your SWPPP. For all other facilities, you must develop a plan by completing all the following steps and document in your SWPPP (required in Part III.C.4 of this permit) the results of each step.

a. Identify all impervious surfaces that are subject to this permit, as defined in Part III.A.1.a, and calculate the total impervious surface area for your facility.

b. Identify the impervious surface area treated with existing stormwater best management practices (BMPs) that provide the full one inch or WQv treatment (as defined in Appendix E, "Treatment of Impervious Surfaces").

c. Identify the impervious surface area partially treated by existing stormwater best management practices (BMPs) that don’t provide the full one inch or WQv treatment. Convert the partially treated area total to its equivalent fully treated area total by applying a proportional factor based on the percentage of the WQv captured. This result is the “adjusted partially treated area.” For example, if only a half inch of rainfall is treated, then only one half of the impervious surface area in the drainage area shall be considered treated.

d. Subtract the treated area result in “b” above and the adjusted partially treated area result in “c” above from the total impervious surface area result in “a” above. The resulting value represents the untreated impervious surface area.

e. Multiply the untreated impervious surface area (result in “d” above) by 20% to calculate the impervious surface area subject to the 20% control measure requirement. Convert this area to acres by dividing your square feet of impervious area by 43,560.

f. Determine all of your available options as follows:

i.) restoration control measures using the Design Manual and/or Proprietary Practices as referenced in Part III.A.1.c.i;

ii.) control measure alternatives through the Accounting Guidance as referenced in Part III.A.1.c.ii; and

iii.) equivalent control measures as referenced in Part III.A.1.c.iii.

g. Evaluate and then select practices from the options (identified in “f” above) that you will

implement to comply with the control measure requirement of this permit (result in "e" above).

h. If after evaluating your potential options for nutrient reductions, you determine it is infeasible to meet the nutrient reduction requirements at your facility, provide your rationale and describe your alternate plan and schedule consistent with Part III.A.1.d for coordinating with the local jurisdiction to implement equivalent off-site projects.

i. Document your selection of BMPs and equivalent measures, including calculations that show your approach will achieve the nutrient reduction requirement.

j. Provide a schedule and basis for all options you selected that cannot be implemented within 30 days of registration under this permit.

k. Specify appropriate routine maintenance schedules for all new and existing BMPs. Include in your plan a procedure for inspection and documentation of those inspections for all structural, nonstructural and other equivalent control measures.

l. Modify the resulting plan as needed to keep implementation on pace to meet the permit deadline in Part III.A.1.e.

3. Nutrient Control Measure Verification

a. When the required selection of BMPs and equivalent measures have been implemented, you shall obtain written certification by either a Professional Engineer (PE), a Certified Professional in Storm Water Quality (CPSWQ), a Registered Architect, or a Landscape Architect. The certification shall be kept with your SWPPP and provide verification that:

- the type and capacity of the control(s) specified in the SWPPP meet the current design standards specified in the Design Manual, approved Proprietary Practices specification or Accounting Guidance satisfying the permit restoration requirements;
- all equivalent measures specified in the SWPPP have been implemented to achieve the planned nutrient reduction levels;
- all structural BMPs in the SWPPP are properly maintained in accordance with approved design plans;
- all BMPs are supported by procedures in the SWPPP for required inspections and testing;
- all BMPs are fully implemented; and
- the professional signing the verification has visited and examined the facility.

b. For facilities that were registered for coverage under the 02-SW, in order to be eligible for any administrative extension of this permit under the conditions of Part I.H, you must provide an updated SWPPP and complete the Nutrient Reduction Progress Report Form, provided in Appendix F, and send both documents to the Department one (1) year prior to the expiration date of this permit. For all other permittees, you must provide an updated SWPPP and complete the Nutrient Reduction Progress Report Form, provided in Appendix F, and send both documents to the Department within four (4) years from the date you file an NOI.

B. Control Measures and Effluent Limits

In the technology-based limits included in Part III.B.1 and in Appendix D, the term "minimize" means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

1. Control Measures

Considering the control measure selection and design considerations, you must select, design, install, and implement control measures (including best management practices) to meet the non-numeric effluent limits, as described below. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. Note that you may deviate from such manufacturer's specifications where you provide justification for such deviation and include documentation of

your rationale in the part of your SWPPP that describes your control measures. If you find that your control measures are not achieving their intended effect of minimizing pollutant discharges, you must modify these control measures as expeditiously as practicable. Regulated stormwater discharges from your facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at your facility.

a. *Control Measure Selection and Design Considerations*

You must consider the following when selecting and designing control measures:

i.) preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;

ii.) using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in your stormwater discharge;

iii.) assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;

iv.) minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid ground water contamination;

v.) attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;

vi.) conserving and/or restoring riparian buffers will help protect streams from stormwater runoff and improve water quality; and

vii.) using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

b. *Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT)*

i.) *Minimize Exposure.* You must minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). You must store solid chemical products, chemical solutions, paints, oils, solvents, acids, caustic solutions and waste materials under cover on an impervious surface. In minimizing exposure, you should pay particular attention to the following:

- use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
- locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);
- clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
- use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
- use spill/overflow protection equipment;
- drain fluids from equipment and vehicles prior to onsite storage or disposal;
- perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- ensure that all washwater drains to a proper collection system (i.e., not the stormwater drainage system).

The discharge of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit. These wastewaters must be covered under a separate NPDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

Note: Industrial materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged to receiving waters or if discharges are authorized under another NPDES permit.

ii.) *Good Housekeeping.* You must keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers. A good practice for ensuring housekeeping activities are performed at regular intervals would be keeping a schedule for routine grounds maintenance and cleanup.

iii.) *Maintenance.* You must regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters. You must maintain all stormwater control measures used to restore impervious surfaces. You must also maintain all control measures that are used to achieve the effluent limits required by this permit in effective operating condition. Particular care should be taken to inspect compaction dumpsters to prevent debris around or under the dumpster as well as prevent hydraulic fluid leakage. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If you find that your control measures need to be replaced or repaired, you must make the necessary repairs or modifications as expeditiously as practicable.

iv.) *Spill Prevention and Response Procedures.* You must minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. These procedures are complementary to and do not replace any requirements of RCRA (42 U.S.C. §6901), the Department's Land Management Administration Oil Control Program, NFPA 30 Flammable and Combustible Liquids Code or the Spill Prevention, Control and Countermeasure (SPCC) Plan (as a requirement of 40 CFR § 112), At a minimum, you must implement:

- Procedures for plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- Quarterly inspection procedures for containers that are susceptible to spillage or leakage (e.g., used oil) to ensure the containment structures have no leaks/cracks, and that the outlets are properly sealed. Check that plugs are properly affixed, that valves are in working condition, and that neither are leaking;
- Procedure for the discharge of any stormwater from a containment structure, requiring that a sample is taken to ensure that no visible or odorous pollutants are discharged. If a sample contains a visible sheen, floating solids or a noxious smell, then you must discharge the remaining wastewater to a sanitary sewer system or haul it to a recycler or TSDF (Treatment Storage & Disposal Facilities) or disposal facility;
- Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your stormwater pollution prevention team as described in Part III.C.1; and
- Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part

302, occurs during a 24-hour period, you must notify the Department's Emergency Spill Response number at (866) 633-4686 and EPA's National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC, metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the discharge. Local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be in locations that are readily accessible and available.

v.) *Erosion and Sediment Controls.* You must stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions you must take to meet this limit, you must place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the Department's Soil Erosion & Sediment Control resources (found at http://bit.ly/MDE_Sediment_Erosion_and_Control), EPA's internet-based resources relating to BMPs for erosion and sedimentation, including the sector-specific Industrial Stormwater Fact Sheet Series, (www.epa.gov/npdes/stormwater/msgp), National Menu of Stormwater BMPs (www.epa.gov/npdes/stormwater/menuofbmps), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (www.epa.gov/owow/nps/urbanmm/index.html).

vi.) *Management of Runoff.* You must divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize pollutants in your discharges. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the Department's Design Manual, EPA's internet-based resources relating to runoff management, including the sector-specific Industrial Stormwater Fact Sheet Series, (www.epa.gov/npdes/stormwater/msgp), National Menu of Stormwater BMPs (www.epa.gov/npdes/stormwater/menuofbmps), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (www.epa.gov/owow/nps/urbanmm/index.html).

vii.) *Salt Storage Piles or Piles Containing Salt.* You must enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged or if discharges from the piles are authorized under another NPDES or State discharge permit.

viii.) *Sector Specific Non-Numeric Effluent Limits.* Appendix A of this permit identifies your specific Industry Sector. You must achieve any additional non-numeric limits stipulated in the relevant sector-specific section(s) of Appendix D: Sector-Specific Requirements for Industrial Activity.

ix.) *Employee Training.* You must train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your stormwater pollution prevention team described in Part III.C.1, below. Training must cover the specific control measures used to achieve the effluent limits in this part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. As part of the employee training program you must address, at a minimum, the following activities (as applicable): used oil management, spent solvent and paint management, disposal of spent abrasives (e.g., blasting materials, etc.), spill prevention and control, fueling procedures,

general good housekeeping practices (e.g., dumpster/debris removal), used battery management, waste recycling (e.g., metals, plastics), used container controls (e.g., re-banding barrels, plugging drums), etc. The Department recommends training be conducted at least annually (or more often if employee turnover is high).

x.) *Non-Stormwater Discharges.* You must eliminate non-stormwater discharges not authorized by a NPDES or State discharge permit. See Part I.E.3 for a list of non-stormwater discharges authorized by this permit.

xi.) *Waste, Garbage and Floatable Debris.* You must ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged. The Department recommends practices including placing garbage or recycling containers at traffic areas, and identifying a schedule for personnel to walk site for trash and litter daily/weekly/monthly, etc.

xii.) *Dust Generation and Vehicle Tracking of Industrial Materials.* You must minimize generation of dust and offsite tracking of raw, final, or waste materials.

2. Water Quality-Based Effluent Limitations

a. *Water Quality Standards*

Your discharge must be controlled as necessary to meet applicable water quality standards. The Department expects that compliance with the other conditions in this permit will control discharges as necessary to meet applicable water quality standards. There shall be no discharge that causes visible oil sheen, and no discharge of floating solids or persistent foam in other than trace amounts. Persistent foam is foam that does not dissipate within one half-hour of point of discharge. If at any time you become aware, or the Department determines, that your discharge causes or contributes to an exceedance of applicable water quality standards, then you must (1) take corrective action, (2) document the corrective actions, and (3) report the corrective actions to the Department's Water Management Administration Compliance Program as required by Part IV. Additionally, if information in your NOI or required reports or if information from other sources indicates that your discharge is not controlled as necessary to meet applicable water quality standards, the Department may impose additional water quality-based limitations on a site-specific basis or require you to obtain coverage under an individual permit.

b. *Discharges to Water Quality Impaired Waters*

If you discharge to an impaired water, the Department will inform you if any additional monitoring, limits or controls are necessary for your discharge to be consistent with the assumptions of any available wasteload allocation in an EPA Approved TMDL, or if coverage under an individual permit is necessary in accordance with Part I.G.

c. *Tier 2 Antidegradation Requirements for New or Increased Dischargers*

If you are a new discharger or are required to notify the Department of a modified discharge (Part II.F.1), and you discharge directly to waters designated by the State as Tier 2 for antidegradation purposes under 40 CFR 131.12(a), the Department may notify you that additional analyses, control measures, or other permit conditions are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary in accordance with Part I.G.

d. *Criteria Selection*

Any additional numerical water quality based limits for any specific discharger under Part III.B.2 of the permit shall be based solely on Maryland's Numeric Water Criteria for Designated Uses in COMAR 26.08.02.03-3 and Maryland's Criteria for Toxic Substances in Surface Waters in COMAR 26.08.02.03-2, applied at end of pipe, or the applicable wasteload allocation in a final approved TMDL. For any additional control requested by the Department you must include a plan to implement BMPs to address the pollutant of concern in your SWPPP.

C. Stormwater Pollution Prevention Plan (SWPPP) Requirements

The SWPPP is intended to document the selection, design, and installation of control measures. The SWPPP does not contain effluent limitations; the limitations are contained in Part III.A, and Part III.B of the permit, and, for some Industry Sectors, Appendix D of the permit.

Upon registration under this Permit, if you are also subject to other individual NPDES permits or have coverage under an industry-specific general permit for the discharge of stormwater associated with industrial activity, then the requirements of this permit supersede the SWPPP requirements of the other permit(s). All other requirements of the other permit(s) remain in full effect.

Your SWPPP must contain all of the following elements, as described below. You must also meet all of this section's additional SWPPP requirements.

- Stormwater pollution prevention team (see Part III.C.1);
- Site description (see Part III.C.2);
- Summary of potential pollutant sources (see Part III.C.3);
- Description of control measures (see Part III.C.4);
- Schedules and procedures (see Part III.C.5); and
- Signature requirements (see Part III.C.6).

1. Stormwater Pollution Prevention Team

You must identify the staff members (by name or title) that comprise the facility's stormwater pollution prevention team as well as their individual responsibilities. Your stormwater pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.

2. Site Description

Your SWPPP must include the following:

a. *Activities at the Facility.* Provide a description of the nature of the industrial activities at your facility.

b. *General location map.* Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of your facility. Ideally this map will extend one-quarter of a mile beyond the property boundaries of the facility and identify any water body where discharge is conveyed. At least one public roadway must be identified on the map.

c. *Site map.* Provide a map showing:

i.) the size of the property in acres;

ii.) the location and extent of significant structures and impervious surfaces

iii.) the location and extent for planned restoration of impervious surfaces, or other nutrient reduction control measures;

iv.) directions of stormwater flow (use arrows);

v.) locations of all existing structural control measures or BMPs;

vi.) locations of all receiving waters in the immediate vicinity of your facility, indicating if any of the waters are impaired and, if so, whether the waters have TMDLs established for them;

vii.) locations of all stormwater conveyances including ditches, pipes, and swales;

viii.) locations of potential pollutant sources identified under Part III.C.3;

ix.) locations where significant spills or leaks identified under Part III.C.3 have occurred;

x.) locations of all stormwater monitoring points;

xi.) locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 1, No. 2, etc), indicating if you are treating one or more outfalls as substantially identical, and an approximate outline of the areas draining to each outfall;

xii.) municipal separate storm sewer systems, where your stormwater discharges to them;

xiii.) locations and descriptions of all non-stormwater discharges identified under Part I.E.3;

xiv.) locations of the following activities where such activities are exposed to precipitation:

- fueling stations;
- vehicle and equipment maintenance and/or cleaning areas;
- loading/unloading areas;
- locations used for the treatment, storage, or disposal of wastes;
- liquid storage tanks;
- processing and storage areas;
- immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
- transfer areas for substances in bulk; and
- machinery;
- manufacturing buildings and

xv.) locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants.

3. Summary of Potential Pollutant Sources

You must document areas at your facility where industrial materials or activities are exposed to stormwater and from which allowable non-stormwater discharges are released. Industrial materials or activities include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description must include:

a. *Activities in the area.* A list of the industrial activities exposed to stormwater (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).

b. *Pollutants.* A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list must include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to stormwater in the 3 years prior to the date you prepare or amend your SWPPP.

c. *Spills and Leaks.* You must document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. You must document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the 3 years prior to the date you prepare or amend your SWPPP. The plan may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112.

Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602. This permit does not relieve you of

the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.

d. *Non-Stormwater Discharges.* You must document that you have evaluated for the presence of non-stormwater discharges and that all unauthorized discharges have been eliminated. Documentation of your evaluation must include:

i.) The date of any evaluation;

ii.) A description of the evaluation criteria used;

iii.) A list of the outfalls or onsite drainage points that were directly observed during the evaluation;

iv.) The different types of non-stormwater discharge(s) and source locations; and

v.) The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, wash water is collected and hauled away, or an NPDES permit application was submitted for an unauthorized cooling water discharge.

e. *Salt Storage.* You must document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.

f. *Visual Monitoring History.* You must summarize what you have observed as potential problems from stormwater during the previous permit term.

4. Description of Control Measures to Meet Technology- and Water Quality-Based Effluent Limits
You must document the location and type of control measures you have installed and implemented at your site to achieve the non-numeric effluent limits in Part III.B.1.b and, where applicable, in Appendix D Sector-Specific Requirements for Industrial Activity, and the water quality-based effluent limits in Part III.B.2, and describe how you are addressing the control measure selection and design considerations, if applicable, in Part III.A.1.a. This documentation must describe how the control measures at your site address both the pollutant sources identified in Part III.C.3 and any stormwater run-on that commingles with any discharges covered under this permit.

5. Schedules and Procedures

a. Pertaining to Control Measures Used to Comply with the Effluent Limits in Part III.B. The following must be documented in your SWPPP:

i.) *Good Housekeeping (See Part III.B.1.b.ii or Appendix D)* – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers;

ii.) *Maintenance (See Part III.B.1.b.iii or Appendix D)* – Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;

iii.) *Spill Prevention and Response Procedures (See Part III.B.1.b.iv or Appendix D)* – Procedures for preventing and responding to spills and leaks. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by a NPDES permit for the facility, provided that you keep a copy of that other plan onsite and make it available for review consistent with Part III.C.8; and

iv.) *Employee Training (See Part III.B.1.b.ix or Appendix D)* – The SWPPP must identify how often training will take place. All training must be held at least once per calendar year (or more often if employee turnover is high).

b. *Pertaining to Inspection and Monitoring*

i.) You must document in your SWPPP your procedures for performing, as appropriate, the three types of inspections specified by this permit, including:

- Routine facility inspections (see Part V.A.1);
- Quarterly visual assessment of stormwater discharges (see Part V.A.3); and
- Comprehensive site inspections (see Part V.A.2).

ii.) For each type of inspection performed, your SWPPP must identify:

- Person(s) or positions of person(s) responsible for inspection; and
- Specific items to be covered by the inspection, including schedules for specific outfalls.

iii.) If benchmark monitoring is required for your industry or industries, per Appendix D your SWPPP must document:

- Locations where samples are collected, including any determination that two or more outfalls are substantially identical;
- Parameters for sampling and the frequency of sampling for each parameter;
- Schedules for monitoring at your facility;
- Any numeric control values (benchmarks, TMDL-related requirements, or other requirements) applicable to discharges from each outfall; and
- Procedures (e.g., responsible staff, logistics, laboratory to be used, etc.) for gathering storm event data, as specified in Part V.C.

iv.) You must document the following in your SWPPP if you plan to use the substantially identical outfall exception for your quarterly visual assessment requirements in Part V.A.3 or your benchmark monitoring requirements in Part V.B:

- Location of each of the substantially identical outfalls;
- Description of the general industrial activities conducted in the drainage area of each outfall;
- Description of the control measures implemented in the drainage area of each outfall;
- Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges;
- An estimate of the runoff coefficient of the drainage areas (low = under 40%; medium = 40 to 65%; high = above 65%); and
- Why the outfalls are expected to discharge substantially identical effluents.

v.) If you are invoking the exception for inactive and unstaffed sites relating to routine facility inspections and quarterly visual assessments, you must include in your SWPPP the information to support this claim as required by Parts V.A.4. If you are invoking the exception for inactive and unstaffed sites for benchmark monitoring, you must include in your SWPPP the information to support this claim as required by Part V.B.5.

6. Signature Requirements

You must sign and date your SWPPP in accordance with Part II.C, including the date of signature.

7. Required SWPPP Modifications

You must modify your SWPPP whenever necessary to address any of the triggering conditions for corrective action in Part IV and to ensure that they do not reoccur, or to reflect changes implemented when a review following the triggering conditions in Part IV.B indicates that changes to your control measures are necessary to meet the effluent limits in this permit. Changes to your SWPPP document must be made in accordance with the corrective action deadlines in Parts IV.C and IV.D, and must be signed and dated in accordance with Part II.C.

8. Documentation Requirements

You must retain a copy of the current SWPPP required by this permit at your facility, and it must be immediately available to the Department. The Department encourages you to post your SWPPP online and provide the website address on your NOI. You are required to keep the

following inspection, monitoring, and certification records with your SWPPP that together keep your records complete and up-to-date, and demonstrate your full compliance with the conditions of this permit:

a. A copy of the NOI submitted to the Department along with any correspondence exchanged between you and the Department specific to coverage under this permit;
b. A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable);
c. A copy of the relevant portion of any other facility document referred to in your SWPPP, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan;
d. Descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to waters of the U.S., through stormwater or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases (see Part III.B.1.b.iv);
e. Records of employee training, including date training received (see Part III.B.1.b.ix);
f. 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 III.B.1.b.iii);
g. All inspection reports, including the Routine Facility Inspection documentation (see Part V.A.1), the Quarterly Visual Monitoring Form in Appendix B, and the Comprehensive Site Inspection reports (see Part V.A.2);
h. 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 V.C.5);
i. Description of any corrective action taken at your site, including triggering event and dates when problems were discovered and modifications occurred;
j. Documentation of any benchmark exceedances and how they were responded to, including either (1) corrective action taken, (2) a finding that the exceedence was due to natural background pollutant levels, or (3) a finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry practice consistent with Part V.B.3;
k. 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.
l. Schedule of compliance for nutrient control measure planning per Part III.A.2.

If during the term of this permit, your site becomes inactive, you must contact the Department immediately and provide, in writing, the date of inactivity, the facility contact phone number and the location of the SWPPP and additional documentation. These must be made available during normal working hours. Note inactivity does not refer to seasonal closures.

D. Additional Requirements for Facilities Subject To SARA Title III, Section 313 Requirements

If you are subject to SARA Title III, Section 313 (42 U.S.C. 11023) reporting requirements, in your SWPPP you must, in addition to the requirements of this Part, provide additional narrative on the preventive measures used to eliminate the exposure of these chemicals to stormwater run-on or run-off. To identify if your facility is subject to this requirement, visit the Maryland Department of the Environment's Community Right-to-Know website (*http://www.mde.state.md.us*). A list of the Section 313 chemicals can be found at the EPA's LIST OF LISTS Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act (*http://www.epa.gov/*). Additionally, SARA Title III, Section 313 water priority chemicals are often identified on Material Data Safety Sheets (MSDS).

PART IV. CORRECTIVE ACTIONS

A. Conditions Requiring Review and Revision to Eliminate Problem

If any of the following conditions occur, you must review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated in the future:

1. an unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit) occurs at your facility;

2. a discharge violates a numeric effluent limit;

3. you become aware, or the Department determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards;

4. an inspection or evaluation of your facility by a Department official, determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit; or

5. you find in your routine facility inspection (Part V.A.1), quarterly visual assessment (Part V.A.3), or comprehensive site inspection (Part V.A.2) that your control measures are not being properly operated and maintained.

B. Conditions Requiring Review to Determine if Modifications Are Necessary

If any of the following conditions occur, you must review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits in this permit:

1. construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in stormwater from your facility, or significantly increases the quantity of pollutants discharged; or

2. the average of 4 quarterly sampling results exceeds an applicable benchmark. If less than 4 benchmark samples have been taken, but the results are such that an exceedence of the 4 quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than 4 times the benchmark level) this is considered a benchmark exceedence, triggering this review.

C. Corrective Action Deadlines

You must document your discovery of any of the conditions listed in parts IV.A and IV.B within 24 hours of making such discovery. Subsequently, within 14 days of such discovery, you must document any corrective action(s) to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required within 24 hours and 14 days is detailed in part IV.D. If you determine that changes are necessary following your review, any modifications to your control measures must be made before the next storm event if possible, or as soon as practicable following that storm event. In the event that a deficiency cannot be addressed fully within 30 days, you must call the Department Compliance program and make the Department aware of the situation. These time intervals are not grace periods, but are schedules considered reasonable for documenting your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

Provides discharge authorization only upon Maryland Department of the Environment notification of registration.

D. Corrective Action Report

1. Within 24 hours of discovery of any condition listed in parts IV.A and IV.B, you must document the following information:
- **a.** identification of the condition triggering the need for corrective action review;
- **b.** description of the problem identified; and
- **c.** date the problem was identified.

2. Within 14 days of discovery of any condition listed in parts IV.A and IV.B, above, you must document the following information:
- **a.** summary of corrective action taken or to be taken (or, for triggering events identified in Part IV.B where you determine that corrective action is not necessary, the basis for this determination);
- **b.** notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
- **c.** date corrective action initiated; and
- **d.** date corrective action completed or expected to be completed.

3. You must include this documentation with the annual report required in Part V.A.2.b.

E. Effect of Corrective Action

If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. The Department may consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

F. Substantially Identical Outfalls

If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, your review must assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event.

PART V. INSPECTIONS, MONITORING, AND REPORTING

A. Site Inspections and Evaluations

You must conduct the following inspections or evaluations at your facility in accordance with the monitoring procedures outlined in Part V.C. You must keep a copy of the documentation from all inspections and evaluations onsite with your SWPPP per Part III.C.8.g.

1. <u>Routine Facility Inspection</u>

At least once per quarter, you must conduct a site assessment that will review the effectiveness of the SWPPP. At least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is happening. The facility inspections must be documented with a checklist or other summary signed in accordance with Part II.C.2 of this permit, by qualified personnel, with at least one member of your stormwater pollution prevention team participating. The checklist must include a certification that the site is in compliance with the SWPPP and this permit, or a record of the deficiencies and necessary follow up actions. Refer to Part IV.C Corrective Action Deadlines and Part IV.D. Corrective Action Report for appropriate time frames.

2. Comprehensive Site Compliance Evaluation

You must conduct comprehensive site compliance evaluations once a year. The evaluations must be performed by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and who can evaluate the effectiveness of all existing BMPs. The personnel conducting the evaluations may be either facility employees (such as pollution prevention team members) or contractors you hire. If a scheduled compliance evaluation overlaps with a routine facility inspection, the annual compliance evaluation may be used as one of the four routine facility inspections.

a. Evaluations must include all areas where industrial materials or activities are exposed to stormwater, at a minimum:

i.) Industrial materials, residue or trash that may have or could come into contact with stormwater;

ii.) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;

iii.) Offsite tracking of industrial or waste materials or sediment where vehicles enter or exit the site;

iv.) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;

v.) Evidence of, or the potential for, pollutants entering the drainage system;

vi.) Evidence of pollutants discharging to surface waters at all facility outfalls;

vii.) The condition of and around any outfall, including flow dissipation measures to prevent scouring;

viii.) Training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs (including those required for Chesapeake Bay Restoration); and

ix.) Visual and analytical monitoring results from the past year.

b. A report must be written summarizing the scope of the evaluation, name(s) of personnel performing the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP. Based on the results of the evaluation, the SWPPP must be modified as necessary. Refer to Part IV.C Corrective Action Deadlines and Part IV.D. Corrective Action Report for appropriate time frames.

3. Quarterly Visual Inspections

You are required to begin visual inspections in the first full quarter after you have been notified that you are covered by this permit. For example, if you obtain permit coverage in June, then your first monitoring quarter is July 1 - September 30 of that year. Once each quarter, you must collect a stormwater sample from each outfall (except in adverse weather conditions, substantially identical outfalls, or inactive and unstaffed sites as noted below) and assess the sample visually. Samples may be taken during any precipitation event (except as noted in Areas Subject to Snow below) where there is a measurable discharge and must be sampled within the first 30 minutes of the storm event. In the case of snowmelt, samples must be taken during a period with a measurable discharge from your site. These samples are not required to be collected consistent with 40 CFR 136 procedures but should be collected in such a manner that the samples are representative of the stormwater discharge.

a. The Quarterly Visual Monitoring Form found in Appendix B of this permit must be completed for each sample.

b. Adverse Weather Conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions. When adverse weather conditions prevent the collection of samples during the quarter, a substitute sample must be taken during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter must be included in SWPPP records.

c. *Areas Subject to Snow:* In areas subject to snow, at least one quarterly visual assessment must capture snowmelt discharge. The assessment should identify the date when the sample was taken.

d. *Substantially identical outfalls:* If your facility has two or more outfalls that you believe discharge substantially identical effluents, as documented in Part III.C.5.b, you may conduct quarterly visual assessments of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s) provided that you perform visual assessments on a rotating basis of each substantially identical outfall throughout the period of your coverage under this permit. If stormwater contamination is identified through visual assessment performed at a substantially identical outfall, you must assess and modify your control measures as appropriate for each outfall represented by the monitored outfall.

4. Inactive and Unstaffed Sites Exceptions to Routine Facility Inspections.

The requirement to conduct routine facility inspections and visual monitoring on a quarterly basis does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. Such a facility is only required to conduct an annual comprehensive site inspection in accordance with the requirements of Part V.A.2. To invoke this exception, you must maintain a statement in your SWPPP pursuant to Part III.C.5.b.v indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement must be signed and certified in accordance with Part II.C. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies and you must immediately resume quarterly facility inspections. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you must include the same signed and certified statement as above and retain it with your records pursuant to Part III.C.5.b.v.

B. Industry Specific Benchmarks Monitoring Requirements

This permit stipulates pollutant benchmark concentrations that may be applicable to your discharge. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data are primarily for your use to determine the overall effectiveness of your control measures and to assist you in knowing when additional corrective action(s) may be necessary to comply with the effluent limitations in Part III.B. Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity. Benchmark monitoring, if required, must be conducted according to test procedures approved under 40 CFR Part 136.

1. Applicability of Benchmark Monitoring

You must monitor for any benchmark parameters specified for the industrial sector(s), both primary industrial activity and any co-located industrial activities, applicable to your discharge. Your industry-specific benchmark concentrations are listed in the sector-specific sections of Appendix D. If your facility is in one of the industrial sectors subject to benchmark concentrations that are hardness-dependent, you are required to submit to the Department with your first benchmark discharge monitoring report (Part V.B.4) a hardness value, established consistent with the procedures in Appendix C, which is representative of your receiving water.

Samples must be analyzed consistent with 40 CFR Part 136 analytical methods and using test procedures with quantitation limits at or below benchmark values for all benchmark parameters for which you are required to sample.

2. Benchmark Monitoring Schedule

You must conduct benchmark monitoring quarterly for four (4) full quarters, starting the first full monitoring period (found in Part V.C.7) that occurs, six (6) months after registering under this permit. For example, if you obtain permit coverage in June, six months later is December, then your first monitoring period is Jan 1 – March 31.

3. Required Responses to Benchmark Monitoring Results

a. *Data not exceeding benchmarks:*

After collection of 4 quarterly samples, if the average of the 4 monitoring values for any parameter does not exceed the benchmark, you have fulfilled your monitoring requirements for that parameter for the permit term. For averaging purposes, use a value of zero for any individual sample parameter, analyzed using procedures consistent with Part V.B.1, which is determined to be less than the method detection limit. For sample values that fall between the method detection level and the quantitation limit (i.e., a confirmed detection but below the level that can be reliably quantified), use a value halfway between zero and the quantitation limit. If you have met the requirements and plan to stop benchmark monitoring for a parameter, you must provide written notification to the Department's Compliance Program of this determination with your benchmark monitoring report and modify your SWPPP.

b. *Data exceeding benchmarks:*

After collection of 4 quarterly samples, if the average of the 4 monitoring values for any parameter exceeds the benchmark, you must review the selection, design, installation, and implementation of selected control measures to determine if modifications are necessary to meet the effluent limits in this permit, and either:

i.) Make the necessary modifications and continue quarterly monitoring until you have completed 4 additional quarters of monitoring for which the average does not exceed the benchmark; or

ii.) Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limits or are necessary to meet the water-quality-based effluent limitations in Part III.B of this permit, in which case you must continue monitoring once per year. You must also document your rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with your SWPPP. You must provide written notification to the Department's Compliance Program of this determination with your next benchmark monitoring report.

In accordance with Part V.B, you must review your control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full 4 quarters of monitoring data, if an exceedance of the 4 quarter average is mathematically certain. If after modifying your control measures and conducting 4 additional quarters of monitoring, your average still exceeds the benchmark (or if an exceedance of the benchmark by the 4 quarter average is mathematically certain prior to conducting the full 4 additional quarters of monitoring), you must again review your control measures and take one of the two actions above.

c. *Natural Background Pollutant Levels:*

Following the first 4 quarters of benchmark monitoring (or sooner if the exceedance is triggered by less than 4 quarters of data, see above), if the average concentration of a pollutant exceeds a benchmark value, and you determine that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, you are not required to perform corrective action or additional benchmark monitoring provided that:

i.) The average concentration of your benchmark monitoring results is less than or equal to the concentration of that pollutant in the natural background;

ii.) You must document and maintain with the SWPPP your supporting rationale for

concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. You must include in your supporting rationale any data previously collected by you or others (including literature studies) that describe the levels of natural background pollutants in your stormwater discharge; and

iii.) You notify the Departments Compliance Program on your final quarterly benchmark monitoring report that the benchmark exceedances are attributable solely to natural background pollutant levels.

Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on your site, or pollutants in run-on from neighboring sources which are not naturally occurring.

4. Submitting Benchmark Discharge Monitoring Reports (DMRs)

You must summarize and submit benchmark monitoring information electronically using NetDMR once you are granted access to this tool, unless you demonstrate a reasonable basis that precludes the use of NetDMR. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

a. NetDMR is a U.S. EPA tool allowing regulated Clean Water Act permittees to submit monitoring reports electronically via a secure Internet application. You must apply for access to NetDMR at www.epa.gov/netdmr and register for a NetDMR Webinar, unless you are able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs ("opt-out request"). Before you can submit official DMRs using NetDMR you must attend a training Webinar and successfully set-up and submit test monitoring results electronically. You must complete all requirements to gain access to NetDMR within six (6) months of authorization under this permit, including applying for access within one (1) month of being registered.

b. Opt-out requests must be submitted in writing to the Department for written approval at least sixty (60) days prior to the date you would be required under this permit to begin using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department unless the permittee submits a renewed opt-out request and such request is approved by the Department. All opt-out requests and subsequent hardcopy DMRs should be sent to the following addresses with "Attn: DMRs":

Maryland Department of the Environment
WMA – Compliance Program
1800 Washington Blvd., Suite 425
Baltimore, MD 21230

c. If you are required to do benchmark monitoring for specific pollutants you must report the quarterly measurements no later than 28 days following the Monitoring Period (Part V. C.7), and according to the other Monitoring Procedures (Part V.C).

5. Exception for Inactive and Unstaffed Sites

The requirement for benchmark monitoring does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. To invoke this exception, you must do the following:

- Maintain a statement onsite with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater in accordance with the substantive requirements in 40 CFR 122.26(g) and sign and certify the statement in accordance with Part II.C; and
- If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies

and you must immediately begin complying with the applicable benchmark monitoring requirements under Part V.B as if you were in your first year of permit coverage. You must indicate in your first benchmark monitoring report that your facility has materials or activities exposed to stormwater or has become active and/or staffed.

- If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you must provide written notification to the Department's Compliance Program of this change in your next benchmark monitoring report. You may discontinue benchmark monitoring once you have notified the Department, and prepared and signed the certification statement described above concerning your facility's qualification for this special exception.

6. Substantially identical outfalls

If your facility has two or more outfalls that you believe discharge substantially identical effluents, as documented in Part III.C.5.b, you may benchmark monitoring of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s) provided that you perform benchmark monitoring on a rotating basis of each substantially identical outfall throughout the period you are required to under this permit. If stormwater contamination is identified through benchmark monitoring performed at a substantially identical outfall, you must assess and modify your control measures as appropriate for each outfall represented by the monitored outfall.

C. Monitoring Procedures

You must collect and analyze stormwater samples and document monitoring activities for visual and benchmark monitoring consistently with the procedures described in this section and the industry specific benchmark monitoring requirements.

1. Monitored Outfalls

You must conduct monitoring as required by this permit at each outfall authorized by this permit, except when an outfall is exempt from monitoring as a substantially identical outfall. If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on the similarities of the general industrial activities and control measures, exposed materials that may significantly contribute pollutants to stormwater, and runoff coefficients of their drainage areas, you may monitor the effluent of just one of the outfalls and report that the results also apply to the substantially identical outfall(s). As required in Part III.C.5, your SWPPP must identify each outfall authorized by this permit and describe the rationale for any substantially identical outfall determinations.

2. Commingled Discharges

If discharges authorized by this permit commingle with discharges not authorized under this permit, any required sampling of the authorized discharges must be performed at a point before they mix with other waste streams, to the extent practicable. The following are some examples of mixed water source situations that should not be sampled.

- **a.** A common ditch that carries stormwater from properties upstream. In this case, the stormwater from the permitted facility is mixed with other water. You should find a location or locations where your facility's stormwater alone can be sampled.
- **b.** A partially submerged storm sewer pipe where it discharges into the receiving water body. In this case, this final discharge point should not be used as a sampling point because the stormwater flow is mixed with the receiving water.
- **c.** A manhole that carries stormwater not only from the permitted facility but from other stormwater sources as well. If taking a grab sample from a manhole, you should make sure

that the flow in that pipe is entirely from your facility.

3. Measurable Storm Events
All required monitoring must be performed on a storm event that results in an actual discharge from your site ("measurable storm event") that follows the preceding measurable storm event by at least 72 hours (3 days). The 72-hour (3-day) storm interval does not apply if you are able to document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at your site.

For each monitoring event, except snowmelt monitoring, you must identify the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and time (in days) since the previous measurable storm event. For snowmelt monitoring, you must identify the date of the sampling event.

4. Sample Type
You must take a minimum of one grab sample from a discharge resulting from a measurable storm event as described above. Samples must be collected within the first 30 minutes of a measurable storm event. However, the Department does not advocate impractical or potentially unsafe sampling methods during periods of adverse weather conditions. Therefore, if it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable after the first 30 minutes and documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge.

5. Adverse Weather Conditions
When adverse weather conditions, as described in Part V.A.3.b, prevent the collection of samples according to the relevant monitoring schedule, you must take a substitute sample during the next qualifying storm event. Adverse weather does not exempt you from having to file a benchmark monitoring report in accordance with your sampling schedule. You must keep a record with your SWPPP of any failure to monitor as specified, indicating the basis for not sampling during the usual reporting period.

6. Representative Sampling
You must take all required samples and measurements at times to be representative of the quantity and quality of the discharges during the specified monitoring periods. At a minimum, samples must be taken once every quarter unless otherwise specified.

The sampling and analytical methods used must conform to procedures for the analysis of pollutants as identified in 40 CFR 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants" except for visual monitoring which is not subject to 40 CFR 136, or unless otherwise specified.

7. Monitoring Periods
Visual (Part V.A.3) and benchmark (Part V.B.2) monitoring are required on a quarterly basis, following these 3-month intervals:
a. January 1 – March 31;
b. April 1 – June 30;
c. July 1 – September 30; and
d. October 1 – December 31.

8. Data Recording Requirements
If you are required to perform monitoring, you must record the following information for each sample:
a. The exact place, date, and time of sampling or measurement;
b. The person(s) who performed the sampling or measurement;
c. The dates and times the analyses were performed;
d. The person(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of all required analyses.

D. Hazardous Substances or Oil in Stormwater Discharge(s) Reporting

1. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill.

2. You must prevent the discharge of hazardous substances or oil in the stormwater discharge(s) from your facility in accordance with your SWPPP. This permit does not relieve you of the reporting requirements of 40 CFR part 117 and 40 CFR part 302. If a spill or discharge of hazardous substances or oil occurs you must do the following:
a. Notify the Department by calling its Emergency Response Division at (866) 633-4686 and notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC metropolitan area, at (202) 426-2675 in accordance with the requirements of COMAR 26.10.01.03, 40 CFR 117 and 40 CFR 302 respectively as soon as he or she has knowledge of the discharge;
b. Submit to the Department a written description within 10 working days of knowledge of the incident including: the type and estimate of the amount of material released, the date it occurred, the circumstances leading to it, and steps to be taken in accordance with Part V.C.1.c, below, and any other information as required by COMAR 26.10.01.03; and
c. Modify the SWPPP within 14 calendar days of knowledge of the incident to (1) provide a description of the release, the circumstances leading to it, and the date it occurred and (2) identify measures to prevent the reoccurrence of respond to such releases and modify the plan where appropriate.

E. Records Retention

You must retain all records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, and original recordings from continuous monitoring instrumentation, for a minimum of five (5) years. This period shall be extended automatically during the course of litigation, or when requested by the Department.

PART VI. STANDARD PERMIT CONDITIONS

A. Compliance with this General Permit and Water Pollution Abatement Statutes

You must comply at all times with the terms and conditions of this permit, the provisions of the Environmental Article, Title 7, Subtitle 2 and Title 9, Subtitles 2 and 3 of the Annotated Code of Maryland, and the Clean Water Act, 33 U.S.C. § 1251 et seq. Any noncompliance with any of the requirements of this permit constitutes a violation of the Clean Water Act.

As detailed in Part IV (Corrective Actions) of this permit, failure to take any required corrective actions constitute an independent, additional violation of this permit and the Clean Water Act. As such, any actions and time periods specified for remedying noncompliance do not absolve parties of the initial underlying noncompliance. However, where corrective action is triggered by an event that

does not itself constitute permit noncompliance, such as an exceedance of an applicable benchmark, there is no permit violation provided you take the required corrective action within the relevant deadlines established in Part IV.C.

B. Civil and Criminal Liability

Nothing in this permit shall be construed to preclude the institution of any legal action nor relieve you from any civil or criminal responsibilities, liabilities, and/or penalties for noncompliance with Title 9 of the Environment Article, Annotated Code of Maryland or any federal, local or other state law or regulation.

C. Action on Violations

The issuance or reissuance of this permit does not constitute a decision by the State not to proceed in an administrative, civil, or criminal action for any violations of State law or regulations occurring before the issuance or re-issuance of this permit, nor a waiver of the State's right to do so.

D. Civil Penalties for Violations of Permit Conditions

In addition to civil penalties for violations of State water pollution control laws set forth in Section 9-342 of the Environment Article, Annotated Code of Maryland, the Clean Water Act provides that any person who violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act or in a permit issued under Section 404 of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. Statutory penalties of the CWA are subject to the Civil Monetary Penalty Inflation Adjustment Rule published in the federal register 2009.

E. Criminal Penalties for Violations of Permit Conditions

In addition to criminal penalties for violations of State water pollution control laws set forth in Section 9-343 of the Environment Article, Annotated Code of Maryland, the Clean Water Act provides that:

1. Any person who negligently violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one (1) year, or by both.

2. Any person who knowingly violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than three (3) years, or by both.

3. Any person who knowingly violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, is subject to a fine of not more than $250,000 or imprisonment of not more than fifteen (15) years, or both. A person that is a corporation, must, upon conviction, be subject to a penalty of not more than $1,000,000.

4. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with or renders inaccurate any monitoring device or

method required to be maintained under the Act, is subject to a fine of not more than $10,000 or by imprisonment for not more than two (2) years, or by both.

F. Penalties for Falsification and Tampering

Per the Environment Article, §9-343, Annotated Code of Maryland, any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with or renders inaccurate any monitoring device or method required to be maintained under this permit must, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. Per the federal Clean Water Act, any person who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under the Act, or who knowingly makes any false statement, representation, or certification in any records or other documents submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance must, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or by both.

G. Right of Entry

You must permit the Secretary of the Department, the Regional Administrator for the EPA, or their authorized representatives, upon the presentation of credentials, to:

1. enter upon your premises where a discharges' source is located or where any records are required to be kept under the terms and conditions of this permit;

2. access and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;

3. inspect, at reasonable times, any monitoring equipment or monitoring method required in this permit;

4. inspect, at reasonable times, any collection, treatment, pollution management, or discharge facilities required under this permit;

5. sample, at reasonable times, any discharge of pollutants; and

6. take photographs (which may require direction for reasons of national security).

H. Property Rights/Compliance with Other Requirements

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

I. Duty to Provide Information

You must provide within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit to the Department. You must also provide copies of records required to be kept by this permit to the Department, upon request.

J. Submitting Additional or Corrected Information

When you become aware that you failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Department, you must submit the facts or

information to the Department within 30 days.

K. Availability of Reports

Except for data determined to be confidential under the Maryland Public Information Act and/or Section 308 of the Clean Water Act, 33 U.S.C. § 1318, all submitted data must be available for public inspection at the offices of the Department and the Regional Administrator of the Environmental Protection Agency.

L. Removed Substances

Wastes such as solids, sludges, or other pollutants removed from or resulting from treatment or control of wastewaters or facility operations, must be disposed of in a manner to prevent any wastes or runoff from wastes from contacting waters of the State.

M. Facility Operation and Maintenance

You must at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used to achieve compliance with the conditions of the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or a similar system that you have installed only when the operation is necessary to achieve compliance with the conditions of the permit.

N. Toxic Pollutants

You must comply with effluent standards or prohibitions for toxic pollutants established under the Federal Clean Water Act, or under Section 9-314 and Sections 9-322 to 9-328 of the Environment Article, Annotated Code of Maryland. You must be in compliance within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

O. Oil and Hazardous Substances Prohibited

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve you from any responsibility, liability, or penalties to which the permittee may be subject under Section 311 of the Clean Water Act (33. U.S.C. § 1321), or under the Annotated Code of Maryland.

Permittees may be subject to additional requirements and regulations dictated by the Department's Oil Control Program and Emergency Planning and Community Right-to-Know Act (EPCRA) (40 CFR 116). Any requirements listed in this permit which control grease, oil or fuel are to address potential pollutants not governed directly by Oil Pollution Prevention (40 CFR 112), as the handling and storage of fuel and other petroleum products has a potential to cause negative impacts to waters of the state.

P. Water Construction and Obstruction

This permit does not authorize you to construct or place physical structures, facilities, or debris or undertake related activities in any waters of the State.

Q. Permit Modification

The Department may revoke this permit or modify this permit to include different limitations and requirements, in accordance with the procedures contained in COMAR 26.08.04.10 and 40 C.F.R. §§ 122.62, 122.63, 122.64 and 124.5.

This permit must be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301, 304, and 307 of the Clean Water Act [33 USCS §§ 1311, 1314, 1317] if the effluent standard or limitation issued or approved:

1. contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or

2. controls any pollutant not limited in this permit. This permit, as modified or reissued under this section, must also contain any other requirements of the Act then applicable.

R. Total Maximum Daily Load (TMDL)

The permit may be reopened in accordance with Maryland's Administrative Procedures Act to incorporate future Total Maximum Daily Load requirements.

S. Severability

The provisions of this permit are severable. If any provisions of this permit must be held invalid for any reason, the remaining provisions must remain in full force and effect. If the application of any provision of this permit to any circumstances is held invalid, its application to other circumstances must not be affected.

PART VII. AUTHORITY TO ISSUE GENERAL NPDES PERMITS

On September 5, 1974, the Administrator of the EPA approved the proposal submitted by the State of Maryland for the operation of a permit program for discharges into navigable waters under Section 402 of the Federal Clean Water Act, 33 U.S.C. Section 1342.

On September 30, 1990, the Administrator of the EPA approved the proposal submitted by the State of Maryland for the operation of a general permit program.

Under the approvals described above, this general discharge permit is both a State of Maryland general discharge permit and a NPDES general permit.

Jay G. Sakai, Director
Water Management Administration

Appendix A:
Industry Specific Sectors

These Industry Sector descriptions are categorized by Standard Industrial Classification (SIC), and in a few cases by "Activity Code". More detailed descriptions of the SIC codes can be found at Department of Labor's - Occupation, Safety and Health Administration (OSHA) website (http://www.osha.gov/pls/imis/sicsearch.html). References to "sectors" in this permit (e.g., sector-specific monitoring requirements) refer to these groupings.

SIC Code or Activity Code	Activity Represented
SECTOR A: TIMBER PRODUCTS	
2421	General Sawmills and Planing Mills
2491	Wood Preserving
2411	Log Storage and Handling
2426	Hardwood Dimension and Flooring Mills
2429	Special Product Sawmills, Not Elsewhere Classified
2431-2439 (except 2434, see Sector W)	Millwork, Veneer, Plywood, and Structural Wood
2448	Wood Pallets and Skids
2449	Wood Containers, Not Elsewhere Classified
2451, 2452	Wood Buildings and Mobile Homes
2493	Reconstituted Wood Products
2499	Wood Products, Not Elsewhere Classified
2441	Nailed and Lock Corner Wood Boxes and Shook
SECTOR B: PAPER AND ALLIED PRODUCTS	
2631	Paperboard Mills
2611	Pulp Mills
2621	Paper Mills
2652-2657	Paperboard Containers and Boxes
2671-2679	Converted Paper and Paperboard Products, Except Containers and Boxes
SECTOR C: CHEMICALS AND ALLIED PRODUCTS	
2873-2879	(Subsector C1) Agricultural Chemicals
2812-2819	(Subsector C2) Industrial Inorganic Chemicals
2841-2844	(Subsector C3) Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations
2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Manmade Fibers Except Glass
2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; in vitro and in vivo Diagnostic Substances; and Biological Products, Except Diagnostic Substances
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products
2861-2869	Industrial Organic Chemicals
2891-2899	Miscellaneous Chemical Products
3952 (limited to list of inks and paints)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors
2911	Petroleum Refining
SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS	
2951, 2952	Asphalt Paving and Roofing Materials (except Bituminous concrete)
2992, 2999	Miscellaneous Products of Petroleum and Coal

SIC Code or Activity Code	Activity Represented
SECTOR E: GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM PRODUCTS	
3251-3259	Structural Clay Products
3261-3269	Pottery and Related Products
3274-3275	Lime & Gypsum Products
3211	Flat Glass
3221, 3229	Glass and Glassware, Pressed or Blown
3231	Glass Products Made of Purchased Glass
3241	Hydraulic Cement
3281	Cut Stone and Stone Products
3291-3299	Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products
SECTOR F: PRIMARY METALS	
3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills
3321-3325	Iron and Steel Foundries
3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals
3363-3369	Nonferrous Foundries (Castings)
3331-3339	Primary Smelting and Refining of Nonferrous Metals
3341	Secondary Smelting and Refining of Nonferrous Metals
3398, 3399	Miscellaneous Primary Metal Products
SECTOR G: METAL MINING (ORE MINING AND DRESSING)	
	(Reserved)
SECTOR H: COAL MINES AND COAL MINING-RELATED FACILITIES	
	(Reserved)
SECTOR I: OIL AND GAS EXTRACTION AND REFINING	
1311	Crude Petroleum and Natural Gas
1321	Natural Gas Liquids
1381-1389	Oil and Gas Field Services
SECTOR J: MINERAL MINING AND DRESSING	
	(Reserved)
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES	
HZ	Hazardous Waste Treatment, Storage, or Disposal Facilities, including those that are operating under interim status or a permit under subtitle C of RCRA
SECTOR L: LANDFILLS AND LAND APPLICATION SITES	
LF, 4953	(Subsector L1) All Landfills with a refuse disposal permit or Land Application Sites with a marginal land permit
	(Subsector L2) All Landfills with a refuse disposal permit or Land Application Sites with a marginal land permit, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60
	(Subsector L3) All Landfills without a refuse disposal permit or Land Application Sites without a marginal land permit that have been notified by the Department that coverage is needed, or the facility was covered under the 02-SW permit
SECTOR M: AUTOMOBILE SALVAGE YARDS	
5015	Automobile Salvage Yards

SIC Code or Activity Code	Activity Represented
SECTOR N: SCRAP RECYCLING FACILITIES	
5093	(Subsector N1) Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling
	(Subsector N2) Source-separated Recycling Facility "Source-Separated Recycling" are facilities that only receive recyclable materials separated at the source from solid waste, primarily from non-industrial and residential sources (i.e., common consumer products including paper, newspaper, glass, cardboard, plastic containers, aluminum and tin cans); including recycling facilities commonly referred to as material recovery facilities (MRF). Additional separation of the collected recyclables can occur at the facility and still considered source-separated recycling, if the stream of material was separated at the source of any trash, commonly called single stream recycling in the state.
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES	
SE	Steam Electric Generating Facilities, including coal handling sites
SECTOR P: LAND TRANSPORTATION AND WAREHOUSING	
4011, 4013	Railroad Transportation *
4111-4173	Local and Highway Passenger Transportation *
4212-4231 (except 4221-4226)	Motor Freight Transportation and Warehousing *
4311	United States Postal Service *
5171	Petroleum Bulk Stations and Terminals *
	* Only those facilities which have vehicle maintenance shops (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) or equipment cleaning operations are included for the facilities specified above in this Sector.
4221-4226	Storage facilities must include stormwater discharges from all areas (except access roads and rail lines) where material handling, equipment, or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to stormwater. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate produce, finished product, by-product, or waste product.
SECTOR Q: WATER TRANSPORTATION	
4412-4499 (except 4493)	Water Transportation Facilities
	Only those facilities listed which have vehicle maintenance shops or equipment cleaning operations are included in this sector. The facility associated with industrial activity are those portions involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) or equipment cleaning operations.
SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS	
3731, 3732	Ship and Boat Building or Repairing Yards
SECTOR S: AIR TRANSPORTATION FACILITIES	
4512-4581	Air Transportation Facilities
	Only those facilities listed which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations are included in this sector. The facility associated with industrial activity are those portions involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations or airport deicing operations.

SIC Code or Activity Code	Activity Represented
SECTOR T: TREATMENT WORKS	
TW, 4952	Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA .
SECTOR U: FOOD AND KINDRED PRODUCTS	
2041-2048	(Subsector U1) Grain Mill Products
2074-2079	(Subsector U2) Fats and Oils Products
2011-2015	Meat Products
2021-2026	Dairy Products
2032-2038	Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties
2051-2053	Bakery Products
2061-2068	Sugar and Confectionery Products
2082-2087	Beverages
2091-2099	Miscellaneous Food Preparations and Kindred Products
2111-2141	Tobacco Products
SECTOR V: TEXTILE MILLS, APPAREL, AND OTHER FABRIC PRODUCT MANUFACTURING; LEATHER AND LEATHER PRODUCTS	
2211-2299	Textile Mill Products
2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials
3131-3199	Leather and Leather Products
SECTOR W: FURNITURE AND FIXTURES	
2434	Wood Kitchen Cabinets
2511-2599	Furniture and Fixtures
SECTOR X: PRINTING AND PUBLISHING	
2711-2796	Printing, Publishing, and Allied Industries
SECTOR Y: RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES	
3011	Tires and Inner Tubes
3021	Rubber and Plastics Footwear
3052, 3053	Gaskets, Packing and Sealing Devices, and Rubber and Plastic Hoses and Belting
3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified
3081-3089	Miscellaneous Plastics Products
3931	Musical Instruments
3942-3949	Dolls, Toys, Games, and Sporting and Athletic Goods
3951-3955 (except 3952 – see Sector C)	Pens, Pencils, and Other Artists' Materials
3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal
3991-3999	Miscellaneous Manufacturing Industries

SIC Code or Activity Code	Activity Represented
SECTOR Z: LEATHER TANNING AND FINISHING	
3111	Leather Tanning and Finishing
SECTOR AA: FABRICATED METAL PRODUCTS	
3411-3499	Fabricated Metal Products, Fabricated Metal Coating and Engraving, and Allied Services.
3911-3915	Jewelry, Silverware, and Plated Ware
SECTOR AB: TRANSPORTATION EQUIPMENT, INDUSTRIAL OR COMMERCIAL MACHINERY	
3511-3599 (except 3571-3579 see Sector AC)	Industrial and Commercial Machinery
3711-3799 (except 3731, 3732 see Sector R)	Transportation Equipment
SECTOR AC: ELECTRONIC, ELECTRICAL, PHOTOGRAPHIC, AND OPTICAL GOODS	
3571-3579	Computer and Office Equipment
3812-3873	Measuring, Analyzing, and Controlling Instruments; Photographic and Optical Goods, Watches, and Clocks
3612-3699	Electronic and Electrical Equipment and Components
SECTOR AD.a: DEPARTMENT OF PUBLIC WORKS AND HIGHWAY MAINTENANCE FACILITIES	
DPW, HM, 1611, 1622, 1623, 1629	Department of Public Works (DPW) and Highway Maintenance (HM) facilities that have operations including vehicle and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations and salt storage for road deicing activities. Department of public works and highway maintenance facilities where no vehicle repair is occurring are not required to apply for coverage. NOTE: Coverage under this permit is not required for a municipally owned and operated facility unless the facility is notified by the Department that coverage is needed, or the facility was covered under the 02-SW permit.
SECTOR AD.b: SCHOOL BUS MAINTENANCE FACILITIES	
82xx	School Bus Maintenance facilities that have operations including vehicle and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling and lubrication), and equipment cleaning operations. NOTE: Coverage under this permit is not required for a municipally owned and operated facility unless the facility is notified by the Department that coverage is needed, or the facility was covered under the 02-SW permit.
SECTOR AD: NON-CLASSIFIED FACILITIES	
AD	Other stormwater discharges to waters of the state designated by the Department as needing a permit (see 40 CFR 122.26.(a)(9)(i)(C) & (D)) or any facility discharging stormwater associated with industrial activity not described by any Sectors A-AC. NOTE: Facilities may not elect to be covered under Sector AD. Only the Department may assign a facility to Sector AD.

Appendix B:
Quarterly Visual Monitoring

Quarterly Visual Monitoring Form

Fill out a separate form for each outfall sampled.

Sample Location					
Quarter / Year:		**Date / Time Collected:**		**Date / Time Examined:**	
Qualifying Storm Event?	Yes No	**Runoff Source:**	Rainfall Snowmelt		
Collector's Name & Title					
Examiner's Name & Title					

Parameter	Parameter Description	Parameter Characteristics
1. Color	Does the stormwater appear to have any color? **Yes** **No (Clear)**	If Yes, describe: *Yellow Brown Red Gray Other*:
2. Clarity	Is the stormwater clear? **Yes** **No**	If not clear, which of the following best describes the clarity of the stormwater? *Suspended Solids Milky/Cloudy Opaque Other:*
3. Oil Sheen	Can you see a rainbow effect or sheen on the water surface? **Yes** **No**	Which best describes the sheen? *Rainbow sheet Floating oil globules Other:*
4. Odor	Does the sample have an odor? **Yes** **No**	If Yes, describe: *Chemical Musty Rotten Eggs Sewage Sour Milk Oil/Petroleum Other:*
5. Floating Solids	Is there anything on the surface of the sample? **Yes** **No**	If Yes, describe: *Suds Oily Film Garbage Sewage Water Fowl Excrement Other:*
6. Suspended Solids	Is there anything suspended in the sample? **Yes** **No**	Describe:
******Leave sample undisturbed for 30 minutes.******		
7. Settled Solids	Is there anything settled on the bottom of the sample? **Yes** **No**	Describe: (*note type, size and material after sample is not disturbed for 30 minutes)*
8. Foam	Does foam or material form on the top of the sample surface if you shake it? **Yes** **No**	Describe:

9. If there are any visible indicators of pollution identify (1) where the pollution may come from and (2) any corrective actions taken.

Stormwater Collector's Signature and Date:

Stormwater Examiner's Signature and Date:

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

Instructions for Completing the Visual Monitoring Form

Per PART V. INSPECTIONS, MONITORING, AND REPORTING, you must collect a stormwater sample from each outfall once each quarter for the entire permit term and conduct a visual assessment of each sample. You must follow the monitoring procedures outlined in Part V.C. These samples should be collected in such a manner that they are representative of the stormwater discharge from that outfall. Each assessment must be kept onsite with your SWPPP and available for inspection and review by the Department at anytime.

First, fill out all information on the top of the visual monitoring form. A qualifying storm event is any storm where there is a measurable discharge. Then, take a grab sample in a clear container. Evaluate the sample in a well-lit area for the following parameters:

1. **Color:** Record the best description of the sample color in the appropriate space on the form.
2. **Clarity**: This parameter refers to how cloudy the sample is. It is *usually* an indication of fewer pollutants in the water if the sample is clear or transparent. If the clarity has changed since the last sample, try to identify what might have caused this to happen.
   - **Clear** – Sample doesn't block any light; can be seen through regardless of color.
   - **Cloudy** – Sample blocks some light; objects not clear but can be identified looking through the sample.
   - **Very Cloudy** – Sample blocks most light; objects cannot be identified looking through the sample.
   - **Opaque** – Sample blocks all light; objects cannot be seen when looking through the sample.
3. **Oil Sheen:** Record whether or not an oil sheen is present. If a film of iridescent color is noted on the surface of the sample or a rainbow effect appears to be floating on the surface of the water, this usually indicates oil is present.
4. **Odor:** If sample has no odor other than natural rainwater or snowmelt, write "NO" on the visual monitoring form. Note the presence of any of the following odors if detected, such as gasoline, diesel, oil, solvents (WD-40, other petroleum products, etc.), garbage, fishy, sweet/sugary, any other unusual odors not normally present in clean runoff from the area sampled.
5. **Floating Solids:** A contaminated flow may contain solids or liquids floating on the surface. Identifying floatables can aid in finding the source of the contamination. Examples of floatables are spoiled food products, oils, plant parts, solvents, sawdust, foams and fuel. Give a general description of the type of floating solids present (wood chips, leaf debris, algae, etc) in the general comments section for each sample. Identify amount of floating solids as described below.
   - **High** – More than 20% of the surface of the sample is covered with floating solids.
   - **Moderate** – Less than 20% of the surface of the sample is covered with floating solids.
   - **Slight** – Only a few floating particles observed on the surface of the sample.
   - **None** – No floating solids present on the surface of the sample.
6. **Suspended solids:** Record whether or not suspended solids are present in the sample. Suspended solids are particles floating inside the column of water, not on top, and may contribute to changes in water color or clarity. Cracked or deteriorated concrete or peeling surface paint at an outfall usually indicates the presence of severely contaminated discharges. Contaminants causing this type of damage are usually very acidic or basic.

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

Leave the sample undisturbed for 30 minutes to allow the water and anything in it to settle.

7. **Settled Solids:** After 30 minutes has passed, give a general description of the type of settled solids present (sand, decayed plant matter, rust particles, etc.) in the general comments section.
8. **Foam:** After completing #7, shake the bottle gently. Record foam results on the form as they most closely match one of the descriptions listed below.
   - **None** – Most bubbles break down within ten (10) seconds of shaking; only a few large bubbles persist longer than ten (10) seconds.
   - **Moderate** – Many small bubbles are present but these bubbles persist for less than two (minutes) after shaking.
   - **High** – Many small bubbles are present and they persist longer than two (2) minutes after shaking.
9. Detail any concerns, corrective actions taken and any other indicators of pollution present in the sample. This should include the identified source if there are visible indicators present in the sample. The person performing test must sign and date each form**.**

Appendix C:
Calculating Hardness in Receiving Water for Hardness Dependent Metals

Calculating Hardness in Receiving Waters for Hardness Dependent Metals

Overview - For any sectors required to conduct benchmark samples for a hardness-dependent metal, per Appendix D, the following table includes 'hardness ranges' from which benchmark values are determined. To determine which hardness range to use, you must collect data on the hardness of your receiving water(s). Once the site-specific hardness data have been collected, the corresponding benchmark value for each metal is determined by comparing where the hardness data fall within 25 mg/L ranges, as shown in Table Appendix C-1. If the hardness is 100 mg/L, the metal benchmark values are still valid.

Table Appendix C-1. Hardness Ranges to Be Used to Determine Benchmark Values for Cadmium, Copper, Lead, Nickel, Silver, and Zinc.

All Units mg/L	Benchmark Values (mg/L, total)					
	Cadmium	Copper	Lead	Nickel	Silver	Zinc
0-25 mg/L	0.0005	0.0038	0.014	0.15	0.0007	0.04
25-50 mg/L	0.0008	0.0056	0.023	0.20	0.0007	0.05
50-75 mg/L	0.0013	0.0090	0.045	0.32	0.0017	0.08
75-100 mg/L	0.0018	0.0123	0.069	0.42	0.0030	0.11
100-125 mg/L	0.0023	0.0156	0.095	0.52	0.0046	0.13
125-150 mg/L	0.0029	0.0189	0.122	0.61	0.0065	0.16
150-175 mg/L	0.0034	0.0221	0.151	0.71	0.0087	0.18
175-200 mg/L	0.0039	0.0253	0.182	0.80	0.0112	0.20
200-225 mg/L	0.0045	0.0285	0.213	0.89	0.0138	0.23
225-250 mg/L	0.0050	0.0316	0.246	0.98	0.0168	0.25
250+ mg/L	0.0053	0.0332	0.262	1.02	0.0183	0.26

How to Determine Hardness for Hardness-Dependent Parameters.
You may select one of three methods to determine hardness, including; individual grab sampling, grab sampling by a group of operators which discharge to the same receiving water, or using third-party data. Regardless of the method used, you are responsible for documenting the procedures used for determining hardness values. Once the hardness value is established, you are required to include this information in your first benchmark report submitted to the Department so that the Department can make appropriate comparisons between your benchmark monitoring results and the corresponding benchmark. You must retain all report and monitoring data in accordance with Part III.C.8 of the permit. The three method options for determining hardness are detailed in the following sections.

1. *Permittee Samples for Receiving Stream Hardness*
This method involves collecting samples in the receiving water and submitting these to a laboratory for analysis. If you elect to sample your receiving water(s) and submit samples for analysis, hardness must be determined from the closest intermittent or perennial stream downstream of your point of discharge. The sample can be collected during either dry or wet weather. Collection of the sample during wet weather is more representative of conditions during storm water discharges; however, collection of in-stream samples during wet weather events may be impracticable or present safety issues.
Hardness must be sampled and analyzed using approved methods as described in 40 CFR Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants).

2. *Group Monitoring for Receiving Stream Hardness*
You can be part of a group of permittees discharging to the same receiving waters and collect samples that are representative of the hardness values for all members of the group. In this scenario, hardness of the receiving water must be determined using 40 CFR Part 136 procedures and the results shared by group members. To use the same results, hardness measurements must be taken on a stream reach within a reasonable distance of the discharge points of each of the group members.

3. *Collection of Third-Party Hardness Data*
You can submit receiving stream hardness data collected by a third party provided the results are collected consistent with the approved 40 CFR Part 136 methods. These data may come from a local water utility, previously conducted stream reports, TMDLs, peer reviewed literature, other government publications, or data previously collected by the permittee. Data should be less than 10 years old.

Water quality data for many of the nation's surface waters are available on-line or by contacting EPA or a state environmental agency. EPA's data system STORET, short for STOrage and RETrieval, is a repository for receiving water quality, biological, and physical data and is used by state environmental agencies, EPA and other federal agencies, universities, private citizens, and many others. Similarly, state environmental agencies and the U.S. Geological Service (USGS) also have water quality data available that, in some instances, can be accessed online. "Legacy STORET" codes for hardness include: 259 hardness, carbonate; 260 hardness, noncarbonated; and 261 calcium + magnesium, while more recent, "Modern STORET" data codes include: 00900 hardness, 00901 carbonate hardness, and 00902 noncarbonate hardness; or the discrete measurements of calcium (00915) and magnesium (00925) can be used to calculate hardness. Hardness data historically has been reported as "carbonate," "noncarbonate," or "Ca + Mg." If these are unavailable, then individual results for calcium (Ca) and magnesium (Mg) may be used to calculate hardness using the following equation:

$$\text{mg/L } CaCO_3 = 2.497\ (\text{Ca mg/L}) + 4.118\ (\text{Mg mg/L})$$

When interpreting the data for carbonate and non-carbonate hardness, note that total hardness is equivalent to the sum of carbonate and noncarbonate hardness if both forms are reported. If only carbonate hardness is reported, it is more than likely that noncarbonate hardness is absent and the total hardness is equivalent to the available carbonate hardness.

Appendix D:
Sector-Specific Requirements for Industrial Activity

You must comply with Appendix D sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

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Sector A – Timber Products.

A.1 Covered Stormwater Discharges.

The requirements in Sector A apply to stormwater discharges associated with industrial activity from Timber Products facilities as identified by the SIC Codes specified under Sector A in Appendix A of the permit.

A.2 Limitation on Coverage.

A.2.1 *Prohibition of Discharges.* (See also Part I.C Limitations on Coverage) Not covered by this permit: stormwater discharges from areas where there may be contact with the chemical formulations sprayed to provide surface protection. These discharges must be covered by a separate NPDES/State discharge permit.

A.2.2 Intentionally Left Blank

A.3 Additional Technology-Based Effluent Limits.

A.3.1 *Good Housekeeping.* (See also Part III.B.1.b.ii) In areas where storage, loading and unloading, and material handling occur, perform good housekeeping to limit the discharge of wood debris, minimize the leachate generated from decaying wood materials, and minimize the generation of dust.

A.4 Additional SWPPP Requirements.

A.4.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: processing areas, treatment chemical storage areas, treated wood and residue storage areas, wet decking areas, dry decking areas, untreated wood and residue storage areas, and treatment equipment storage areas.

A.4.2 *Inventory of Exposed Materials.* (See also Part III.C.3) Where such information exists, if your facility has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving, document in your SWPPP the following: areas where contaminated soils, treatment equipment, and stored materials still remain and the management practices employed to minimize the contact of these materials with stormwater runoff.

A.4.3 *Description of Stormwater Management Controls.* (See also Part III.C.4) Document measures implemented to address the following activities and sources: log, lumber, and wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment and vehicle maintenance, storage, and repair areas. If your facility performs wood surface protection and preservation activities, address the specific control measures, including any BMPs, for these activities.

A.5 Additional Inspection Requirements.

See also Part V.A. If your facility performs wood surface protection and preservation activities, inspect processing areas, transport areas, and treated wood storage areas monthly to assess the usefulness of practices to minimize the deposit of treatment chemicals on unprotected soils and in areas that will come in contact with stormwater discharges.

A.6 Intentionally Left Blank

A.7 Effluent Limitations Based on Effluent Limitations Guidelines.

Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas are required to meet specific effluent limits (40 CFR Part 429, Subpart I) and are therefore not covered by this permit. You must obtain an individual discharge permit to discharge this type of effluent.

Sector B – Paper and Allied Products.

B.1 Covered Stormwater Discharges.

No additional requirements apply to stormwater discharges associated with industrial activity from Paper and Allied Products Manufacturing facilities, as identified by the SIC Codes specified under Sector B in Appendix A of the permit.

B.2 Intentionally Left Blank

Sector C – Chemical and Allied Products Manufacturing, and Refining.

C.1 Covered Stormwater Discharges.

The requirements in Sector C apply to stormwater discharges associated with industrial activity from Chemical and Allied Products Manufacturing, and Refining facilities, as identified by the SIC Codes specified under Sector C in Appendix A of the permit.

C.2 Limitations on Coverage.

C.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage) The following are not covered by this permit: non-stormwater discharges containing inks, paints, or substances (hazardous, nonhazardous, etc.) resulting from an onsite spill, including materials collected in drip pans; washwater from material handling and processing areas; and washwater from drum, tank, or container rinsing and cleaning.

C.3 Sector-Specific Benchmarks

Tables 1and 2 identifies benchmarks that may apply to your specific subsectors of Sector C. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 1 - Subsector C1 Benchmarks (Agricultural Chemicals for SIC 2873-2879)

PARAMETER	Benchmark	Units	Frequency	Sample Type
Nitrate plus Nitrite Nitrogen	0.68	mg/L	1/quarter	Grab
Total Lead[1]	0.082	mg/L	1/quarter	Grab
Total Iron	1.0	mg/L	1/quarter	Grab
Total Zinc[1]	0.12	mg/L	1/quarter	Grab
Phosphorus	2.0	mg/L	1/quarter	Grab

[1] The benchmark values of some metals are dependent on water hardness. For these parameters, you must determine the hardness of the receiving water per Appendix C.

Table 2 - Subsectors C2 (Industrial Inorganic Chemicals for SIC 2812-2819) and C3 (Soaps, Detergents, Cosmetics and Perfumes for SIC 2841 – 2844) Benchmarks

PARAMETER	Benchmark	Units	Frequency	Sample Type
Nitrate plus Nitrite Nitrogen	0.68	mg/L	1/quarter	Grab

C.4 Effluent Limitations Based on Effluent Limitations Guidelines (Limitation)

Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874) required to meet specific effluent limits (40 CFR Part 418, Subpart A) and are therefore not covered by this permit. You must obtain an individual discharge permit to discharge this type of effluent.

Sector D – Asphalt Paving and Roofing Materials and Lubricant Manufacturing.

D.1 Covered Stormwater Discharges.

The requirements in Sector D apply to stormwater discharges associated with industrial activity from Asphalt Paving and Roofing Materials and Lubricant Manufacturing facilities, as identified by the SIC Codes specified under Sector D in Appendix A of the permit.

D.2 Limitations on Coverage.

The following stormwater discharges associated with industrial activity are not authorized by this permit (See also Part I.C Limitations on Coverage)

D.2.1 Discharges from petroleum refining facilities, including those that manufacture asphalt or asphalt products, that are subject to nationally established effluent limitation guidelines found in 40 CFR Part 419 (Petroleum Refining); or

D.2.2 Discharges from oil recycling facilities; or

D.2.3 Discharges associated with fats and oils rendering.

D.2.4 Discharges from bituminous concrete manufacturing facilties. These discharges are covered by a separate general permit, Maryland General Permit No. 10-MM or replacement.

D.3 Intentionally Left Blank

D.4 Effluent Limitations Based on Effluent Limitations Guidelines.
Discharges from asphalt emulsion facilities are required to meet specific effluent limits (40 CFR Part 443, Subpart A) and are therefore not covered by this permit. You must obtain an individual discharge permit to discharge this type of effluent.

Sector E – Glass, Clay, Cement, Concrete, and Gypsum Products.

E.1 Covered Stormwater Discharges.

The requirements in Sector E apply to stormwater discharges associated with industrial activity from Glass, Clay, Cement, Concrete, and Gypsum Products facilities, as identified by the SIC Codes specified under Sector E in Appendix A of the permit.

E.2 Additional Technology-Based Effluent Limits.

E.2.1 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii) With good housekeeping, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater. Consider sweeping regularly or using other equivalent measures to minimize the presence of these materials. Indicate in your SWPPP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. You must also prevent the exposure of fine granular solids (cement, fly ash, kiln dust, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, or buildings, or under other covering.

E.3 Additional SWPPP Requirements.

E.3.1 *Drainage Area Site Map*. (See also Part III.C.2) Document in the SWPPP the locations of the following, as applicable: bag house or other dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

E.3.2 *Certification.* (See also Part III.C.3.d : Non-Stormwater Discharges) For facilities producing ready-mix concrete, concrete block, brick, or similar products applying for coverage under this permit, include in the non-stormwater discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with NPDES/State discharge permit requirements or are recycled.

E.4 Intentionally Left Blank

E.5 Effluent Limitations Based on Effluent Limitations Guidelines.

Discharges from material storage piles at cement manufacturing facilities are required to meet specific effluent limits (40 CFR Part 411, Subpart C) and are therefore not covered by this permit. You must obtain an individual discharge permit to discharge this type of effluent.

Sector F – Primary Metals.

F.1 Covered Stormwater Discharges.

The requirements in Sector F apply to stormwater discharges associated with industrial activity from Primary Metals facilities, as identified by the SIC Codes specified under Sector F in Appendix A of the permit.

F.2 Additional Technology-Based Effluent Limits

F.2.1 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii) As part of your good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and, where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, consider using stormwater management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment.

F.3 Additional SWPPP Requirements.

F.3.1 *Drainage Area Site Map.* (See also Part III.C.2) Identify in the SWPPP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants to waters of the United States.

F.3.2 *Inventory of Exposed Material.* (See also Part III.C.3) Include in the inventory of materials handled at the site that potentially may be exposed to precipitation or runoff, areas where deposition of particulate matter from process air emissions or losses during material-handling activities are possible

F.4 Additional Inspection Requirements. (See also Part V.A) As part of conducting your quarterly routine facility inspections, address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Consider monitoring air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect 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, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

F.5 Intentionally Left Blank

Sector G – Not currently covered in this permit.

Sector H – Not currently covered in this permit.

Sector I – Oil and Gas Extraction.

I.1 Covered Stormwater Discharges.

The requirements in Sector I apply to stormwater discharges associated with industrial activity from Oil and Gas Extraction facilities as identified by the SIC Codes specified under Sector I in Appendix A of the permit.

Discharges of stormwater runoff from field activities or operations associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities are exempt from NPDES/ State discharge permit coverage unless, in accordance with 40 CFR 122.26(c)(1)(iii), the facility:

- Has had a discharge of stormwater resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at anytime since November 16, 1987; or
- Has had a discharge of stormwater resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or
- Contributes to a violation of a water quality standard.

Any stormwater discharges that require permit coverage as a result of meeting one of the conditions of 122.26(c)(1)(iii) may be covered under this permit unless otherwise required to obtain coverage under an alternative NPDES/State discharge general permit or an individual NPDES/State discharge permit as specified in Part I.C Limitations on Coverage.

I.2 Limitations on Coverage.

I.2.1 *Stormwater Discharges Subject to Effluent Limitation Guidelines.* This permit does not authorize stormwater discharges from petroleum drilling operations that are subject to nationally established effluent limitation guidelines found at 40 CFR Part 435, respectively.

I.2.2 *Non-Stormwater Discharges. (See also* Part C.3.d: Non-Stormwater Discharges) Discharges of vehicle and equipment washwater, including tank cleaning operations, are not authorized by this permit. Alternatively, washwater discharges must be authorized under a separate NPDES/State discharge permit, or be discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

I.3 Additional Technology-Based Effluent Limits.

I.3.1 *Vegetative Controls.* Implement vegetative practices designed to preserve existing vegetation, where attainable, and revegetate open areas as soon as practicable after grade drilling. Consider the following (or equivalent measures): temporary or permanent seeding, mulching, sod stabilization, vegetative buffer strips, and tree protection practices. Begin implementing appropriate vegetative practices on all disturbed areas within 14 days following the last activity in that area.

I.4 Additional SWPPP Requirements.

I.4.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: Reportable Quantity (RQ) releases; locations used for the treatment, storage, or disposal of wastes; processing areas and storage areas; chemical mixing areas; construction and drilling areas; all areas subject to the effluent guidelines requirements for “No Discharge” in accordance with 40 CFR 435.32; and the structural controls to achieve compliance with the “No Discharge” requirements.

I.4.2 *Potential Pollutant Sources.* (See also Part III.C.3) Also document in your SWPPP the following sources and activities that have potential pollutants associated with them: chemical, cement, mud, or gel mixing activities; drilling or mining activities; and equipment cleaning and rehabilitation activities. In addition, include information about the reportable quantity (RQ) release that triggered the permit application requirements: the nature of the release (e.g., spill of oil from a drum storage area), amount of oil or hazardous substance released, amount of substance recovered, date of the release, cause of the release (e.g., poor handling techniques and lack of containment in the area), areas affected by the release (i.e., land and water), procedure to clean up release, actions or procedures implemented to prevent or improve response to a release, and remaining potential contamination of stormwater from release (taking into account human health risks, the control of drinking water intakes, and the designated uses of the receiving water).

I.4.3 *Erosion and Sedimentation Control.* (See also Part III.B.1.b.v) Unless covered by the current Construction General Permit (CGP), the additional documentation requirements for sediment and erosion controls for well drillings and sand/shale mining areas include the following:

I.4.3.1 *Site Description.* Also include a description in your SWPPP of the nature of the exploration activity, estimates of the total area of site and area disturbed due to exploration activity, an estimate of runoff coefficient of the site, a site drainage map, including approximate slopes, and the names of all receiving waters.

I.4.3.2 *Vegetative Controls.* Document vegetative practices used consistent with Part I.3.1 in the SWPPP.

I.5 Additional Inspection Requirements.

All erosion and sedimentation control measures must be inspected every 7 days.

Sector J – Not currently covered in this permit.

Sector K – Hazardous Waste Treatment, Storage, or Disposal Facilities.

K.1 Covered Stormwater Discharges.

The requirements in Sector K apply to stormwater discharges associated with industrial activity from Hazardous Waste Treatment, Storage, or Disposal facilities (TSDFs) as identified by the Activity Code specified under Sector K in Appendix A of the permit.

K.2 Industrial Activities Covered by Sector K.

This permit authorizes stormwater discharges associated with industrial activity from facilities that treat, store, or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of RCRA and disposal facilities that have been properly closed and capped, although considered inactive.

K.3 Limitations on Coverage.

Prohibition of Non-Stormwater Discharges. (See also Part I.C Limitations on Coverage) The following are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory-derived wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility. Note: Any leachate for this sector is considered a wastewater and any stormwater discharge combined with this leachate/wastewater is not authorized under this permit.

K.4 Definitions.

K.4.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part K.4.5. Some specific areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

K.4.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

K.4.3 *Landfill* - an area of land or an excavation in which wastes are placed for permanent disposal, but that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, salt bed formation, underground mine, or cave as these terms are defined in 40 CFR 257.2, 258.2, and 260.10.

K.4.4 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category), all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated stormwater, and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

K.4.5 *Non-contaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part K.4.4. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

K.5 Intentionally Left Blank

K.6 Effluent Limitations Based on Effluent Limitations Guidelines.
Discharges from hazardous waste landfills that are required to meet specific effluent limits (40 CFR Part 445, Subpart A) are not covered by this permit. You must obtain an individual discharge permit to discharge this type of effluent.

Sector L – Landfills and Land Application Sites.

L.1 Covered Stormwater Discharges.

The requirements in Sector L apply to stormwater discharges associated with industrial activity from Landfills and Land Application Sites as identified by the Activity Code specified under Sector L in Appendix A of the permit.

L.2 Industrial Activities Covered by Sector L.

This permit may authorize stormwater discharges for Sector L facilities associated with waste disposal at landfills and land application sites that receive or have received industrial waste, including sites subject to regulation under Subtitle D of RCRA. This permit does not cover discharges from landfills that receive only municipal wastes.

L.3 Limitations on Coverage.

L.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage) The following discharges are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

L.4 Definitions.

L.4.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Some areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

L.4.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

L.4.3 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category) all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill process wastewater includes, but is not limited to, leachate; gas collection condensate; drained free liquids; laboratory-derived wastewater; contaminated stormwater; and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

L.4.4 *Non-contaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

L.5 Additional Technology-Based Effluent Limits.

L.5.1 *Preventive Maintenance Program.* (See also Part III.B.1.b.iii) As part of your preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems, to prevent commingling of leachate with stormwater; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion. Note: Any leachate for this sector is considered a wastewater and any stormwater discharge combined with this leachate/wastewater is not authorized under this permit.

L.5.2 *Erosion and Sedimentation Control.* (See also Part III.B.1.b.v) Provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following: materials stockpiled for daily, intermediate, and final cover; inactive areas of the landfill; landfills that have

gotten final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.

L.5.3 *Unauthorized Discharge Test Certification.* (See also Part III.C.3.d: Non-Stormwater Discharges) The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

L.6 Additional SWPPP Requirements.

L.6.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches, active and closed land application areas, locations where open dumping is occurring or has occurred, locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, and leachate collection and handling systems.

L.6.2 *Summary of Potential Pollutant Sources.* (See also Part III.C.3) Document in your SWPPP the following sources and activities that have potential pollutants associated with them: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading or unloading; outdoor storage of significant materials, including daily, interim, and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

L.7 Additional Inspection Requirements. (See also Part V.A)

L.7.1 *Inspections of Active Sites.* Except in arid and semi-arid climates, inspect operating landfills and land application sites at least once every 7 days. Focus on areas of landfills that have not yet been finally stabilized; active land application areas, areas used for storage of material and wastes that are exposed to precipitation, stabilization, and structural control measures; leachate collection and treatment systems; and locations where equipment and waste trucks enter and exit the site. Ensure that sediment and erosion control measures are operating properly. For stabilized sites and areas where land application has been completed, or where the climate is arid or semi-arid, conduct inspections at least once every month.

L.7.2 *Inspections of Inactive Sites.* Inspect inactive landfills and land application sites at least quarterly. Qualified personnel must inspect landfill stabilization and structural erosion control measures, leachate collection and treatment systems, and all closed land application areas.

L.8 Additional Post-Authorization Documentation Requirements.

L.8.1 *Recordkeeping and Internal Reporting.* Keep records with your SWPPP of the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track the types and quantities of wastes applied in specific areas.

L.9 Sector-Specific Benchmarks

Tables 3 and 4 identify benchmarks that may apply to your specific subsectors of Sector L. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 3 - Subsector L1 Benchmarks - Landfills and Land Application Sites

PARAMETER	Benchmark	Units	Frequency	Sample Type
Total Suspended Solids (TSS)	100	mg/L	1/quarter	Grab

Table 4 - Subsector L2 Benchmarks - Landfills and Land Application Sites, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60

PARAMETER	Benchmark	Units	Frequency	Sample Type
Total Iron	1.0	mg/L	1/quarter	Grab

L.10. Effluent Limitations Based on Effluent Limitations Guidelines.
Discharges from non-hazardous waste landfills are required to meet specific effluent limits (40 CFR Part 445, Subpart B) and are therefore not covered by this permit. You must obtain an individual discharge permit to discharge this type of effluent.

Sector M – Automobile Salvage Yards.

M.1 Covered Stormwater Discharges.

The requirements in Sector M apply to stormwater discharges associated with industrial activity from Automobile Salvage Yards as identified by the SIC Code specified under Sector M in Appendix A of this permit.

M.2 Additional Technology-Based Effluent Limits.

M.2.1 *Spill and Leak Prevention Procedures.* (See also Part III.B.1.b.iv) Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means to prevent spills and leaks. You must establish clean-up mechanisms and procedures for all fluids (e.g. anti-freeze, used, oil, used fuel, etc.) for all locations that vehicles will be drained of fluids or any equipment receives fluids, and ensure all batteries from vehicles are protected from exposure to stormwater upon arrival at the site.

M.2.2 *Employee Training.* (See also Part III.B.1.b.ix) If applicable to your facility, address the following areas (at a minimum) in your employee training program: proper handling (collection, storage, clean up, and disposal) of oil, used mineral spirits, anti-freeze, mercury switches, and solvents. Also address leak detection and proper clean up procedures of all fluids.

M.2.3 *Management of Runoff.* (See also Part III.B.1.b.vi) Consider the following management practices: berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); berms for uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage; installation of detention ponds; and installation of filtering devices and oil and water separators.

M.3 Additional SWPPP Requirements.

M.3.1 *Drainage Area Site Map.* (See also Part III.C.2) Identify locations used for dismantling, storage, and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or surface runoff: dismantling areas, parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas, and liquid storage tanks and drums for fuel and other fluids. Note: To avoid groundwater contamination, draining must occur on impervious areas.

M.3.2 *Potential Pollutant Sources.* (See also Part III.C.3) Assess the potential for the following to contribute pollutants to stormwater discharges: vehicle storage areas, dismantling areas, parts storage areas (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers), and fueling stations. Facilities that crush vehicles produce a residual fluid that contains petroleum, metal and glass fines. These byproducts will need to be identified as potential pollutants and measures shall be identified to ensure they do not commingle with stormwater. Fluids collected must be handled appropriately.

M.4 Additional Inspection Requirements. (See also Part V.A) Immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks, and address leaks when identified. Inspect quarterly for signs of leakage all equipment containing oily parts, hydraulic fluids, any other types of fluids, or mercury switches. Also, inspect quarterly for signs of leakage all vessels and areas where hazardous materials and general automotive fluids are stored, including, but not limited to, mercury switches, brake fluid, transmission fluid, radiator water, and antifreeze.

M.5 Sector-Specific Benchmarks. Permittee may be subject to requirements for more than one sector/subsector.

Table 5 - Sector M Benchmarks (Automobile Salvage Yards)

PARAMETER	Benchmark	Units	Frequency	Sample Type
Total Suspended Solids (TSS)	100	mg/L	1/quarter	Grab
Total Aluminum	0.75	mg/L	1/quarter	Grab
Total Iron	1.0	mg/L	1/quarter	Grab
Total Lead[1]	0.082	mg/L	1/quarter	Grab

[1] The benchmark values of some metals are dependent on water hardness. For these parameters, you must determine the hardness of the receiving water per Appendix C.

Sector N – Scrap Recycling and Waste Recycling Facilities.

N.1 Covered Stormwater Discharges.

The requirements in Sector N apply to stormwater discharges associated with industrial activity from Scrap Recycling and Waste Recycling facilities as identified by the SIC Code specified under Sector N in Appendix A of the permit.

N.2 Limitation on Coverage.

N.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage) Non-stormwater discharges from turnings containment areas are not covered by this permit (see also Part N.3.2.3). Discharges from containment areas in the absence of a storm event are prohibited unless covered by a separate NPDES/State discharge permit.

N.3 Additional Technology-Based Effluent Limits.

N.3.1 *Scrap and Waste Recycling Facilities (Non-Source Separated, Nonliquid Recyclable Materials).* Requirements for facilities that receive, process, and do wholesale distribution of nonliquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both nonrecyclable and recyclable materials.

N.3.1.1 *Inbound Recyclable and Waste Material Control Program.* Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. Following are some control measure options: (a) provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to your facility; (b) establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; (c) establish procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage, and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in Part N.3.2.6); (d) provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials, including: education on draining and proper disposal of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles when not completed by suppliers; and (e) establish procedures to ensure that liquid wastes, including used oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).

N.3.1.2 *Scrap and Waste Material Stockpiles and Storage (Outdoor).* Minimize contact of stormwater runoff with stockpiled materials, processed materials, and nonrecyclable wastes. Following are some control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing/bio-logs; and (e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).

N.3.1.3 *Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage).* Minimize contact of surface runoff with residual cutting fluids by: (a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or (b) establishing dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with stormwater run-on. Stormwater runoff from these areas can be discharged, provided that any runoff is first collected and treated by an oil and water separator or its equivalent. You

must regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.

N.3.1.4 *Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage).* Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. Following are some control measure options: (a) good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; and (c) disconnecting or sealing off all floor drains connected to the storm sewer system.

N.3.1.5 *Scrap and Recyclable Waste Processing Areas.* Minimize surface runoff from coming in contact with scrap processing equipment. Pay attention to operations that generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (i.e., through good housekeeping, preventive maintenance, etc.). Following are some control measure options: (a) regularly inspect equipment for spills or leaks and malfunctioning, worn, or corroded parts or equipment; (b) establish a preventive maintenance program for processing equipment; (c) use dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches; (d) on unattended hydraulic reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices, or secondary containment that can hold the entire volume of the reservoir; (e) containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of stormwater runoff with outdoor processing equipment or stored materials; (f) oil and water separators or sumps; (g) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (h) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); (i) catch basin filters or sand filters.

N.3.1.6 *Scrap Lead-Acid Battery Program.* Properly handle, store, and dispose of scrap lead-acid batteries. Following are some control measure options (a) segregate scrap lead-acid batteries from other scrap materials; (b) properly handle, store, and dispose of cracked or broken batteries; (c) collect and dispose of leaking lead-acid battery fluid; (d) minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; and (e) provide employee training for the management of scrap batteries.

N.3.1.7 *Spill Prevention and Response Procedures.* (See also Part III.B.1.b.iv)Install alarms and/or pump shutoff systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus room for precipitation can be used. Use a mercury spill kit for any release of mercury from switches, anti-lock brake systems, and switch storage areas.

N.3.1.8 *Supplier Notification Program.* As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions.

N.3.2 Waste Recycling Facilities (Liquid Recyclable Materials).

N.3.2.1 *Waste Material Storage (Indoor).* Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The plan may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. Following are some control measure options (a) procedures for material handling (including labeling and marking); (b) clean up spills and leaks with dry absorbent materials, a wet vacuum system; (c) appropriate maintained containment structures (trenching, curbing, gutters, etc.); and (d) a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas, and properly maintained for continued operation. Drainage should be discharged to an appropriate treatment facility or sanitary sewer system, or otherwise disposed of properly.

These discharges may require coverage under a separate NPDES/ State discharge wastewater permit or industrial user permit under the pretreatment program.

N.3.2.2 *Waste Material Storage (Outdoor).* Minimize contact between stored residual liquids and precipitation or runoff. The plan may refer to applicable portions of other existing plans, such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. Following are some control measure options (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) corrosion protection and/or leak detection systems for storage tanks; and (d) dry-absorbent materials or a wet vacuum system to collect spills.

N.3.2.3 *Trucks and Rail Car Waste Transfer Areas.* Minimize pollutants in discharges from truck and rail car loading and unloading areas. Include measures to clean up minor spills and leaks resulting from the transfer of liquid wastes. Following are two control measure options: (a) containment and diversionary structures to minimize contact with precipitation or runoff, and (b) dry clean-up methods, wet vacuuming, roof coverings, or runoff controls.

N.3.3 *Recycling Facilities (Source-Separated Materials).* The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.

N.3.3.1 *Inbound Recyclable Material Control.* Minimize the chance of accepting nonrecyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Following are some control measure options: (a) providing information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials, (b) training drivers responsible for pickup of recycled material, (c) clearly marking public drop-off containers regarding which materials can be accepted, (d) rejecting nonrecyclable wastes or household hazardous wastes at the source, and (e) establishing procedures for handling and disposal of nonrecyclable material.

N.3.3.2 *Outdoor Storage.* Minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Following are some control measure options (a) provide totally enclosed drop-off containers for the public; (b) install a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; (c) provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper); (d) divert surface water runoff away from outside material storage areas; (e) provide covers over containment bins, dumpsters, and roll-off boxes; and (f) store the equivalent of one day's volume of recyclable material indoors.

N.3.3.3 *Indoor Storage and Material Processing.* Minimize the release of pollutants from indoor storage and processing areas. Following are some control measure options (a) schedule routine good housekeeping measures for all storage and processing areas, (b) prohibit tipping floor washwater from draining to the storm sewer system, and (c) provide employee training on pollution prevention practices.

N.3.3.4 *Vehicle and Equipment Maintenance.* Following are some control measure options for areas where vehicle and equipment maintenance occur outdoors (a) prohibit vehicle and equipment washwater from discharging to the storm sewer system, (b) minimize or eliminate outdoor maintenance areas whenever possible, (c) establish spill prevention and clean-up procedures in fueling areas, (d) avoid topping off fuel tanks, (e) divert runoff from fueling areas, (f) store lubricants and hydraulic fluids indoors, and (g) provide employee training on proper handling and storage of hydraulic fluids and lubricants.

N.4 Additional SWPPP Requirements.

N.4.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: scrap and waste material

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

N.4.2 *Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities.* If you are subject to Part N.3.1.3, your SWPPP must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

N.5 Additional Inspection Requirements.

N.5.1 Inspections for Waste Recycling Facilities. The inspections must be performed quarterly, pursuant to Part V.A, and include, at a minimum, all areas where waste is generated, received, stored, treated, or disposed of and that are exposed to either precipitation or stormwater runoff.

N.6 Sector-Specific Benchmarks for Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling. Permittee may be subject to requirements for more than one sector.

Table 6 - Subsector N1 Benchmarks (Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling)

PARAMETER	Benchmark	Units	Frequency	Sample Type
Chemical Oxygen Demand (COD)	120	mg/L	1/quarter	Grab
Total Suspended Solids (TSS)	100	mg/L	1/quarter	Grab
Total Recoverable Aluminum	0.75	mg/L	1/quarter	Grab
Total Recoverable Iron	1.0	mg/L	1/quarter	Grab
Total Lead[1]	0.082	mg/L	1/quarter	Grab
Total Zinc[1]	0.12	mg/L	1/quarter	Grab
Total Copper[1]	0. 014	mg/L	1/quarter	Grab

[1] The benchmark values of some metals are dependent on water hardness. For these parameters, you must determine the hardness of the receiving water per Appendix C.

Sector O – Steam Electric Generating Facilities.

O.1 Covered Stormwater Discharges.

The requirements in Sector O apply to stormwater discharges associated with industrial activity from Steam Electric Power Generating Facilities as identified by the Activity Code specified under Sector O in Appendix A.

O.2 Industrial Activities Covered by Sector O.

This permit authorizes stormwater discharges from the following industrial activities at Sector O facilities:

O.2.1 steam electric power generation using coal, natural gas, oil, nuclear energy, etc., to produce a steam source, excluding coal handling areas;

O.2.2 Intentionally Left Blank

O.2.3 dual fuel facilities that could employ a steam boiler.

O.3 Limitations on Coverage.

O.3.1 *Prohibition of Non-Stormwater Discharges.* Non-stormwater discharges subject to effluent limitations guidelines are not covered by this permit.

O.3.2 *Prohibition of Stormwater Discharges.* Stormwater discharges from the following are not covered by this permit:

O.3.2.1 ancillary facilities (e.g., fleet centers and substations) that are not contiguous to a stream electric power generating facility;

O.3.2.2 gas turbine facilities (providing the facility is not a dual-fuel facility that includes a steam boiler), and combined-cycle facilities where no supplemental fuel oil is burned (and the facility is not a dual-fuel facility that includes a steam boiler); and

O.3.2.3 cogeneration (combined heat and power) facilities utilizing a gas turbine; and

O.3.2.4 coal pile runoff, including effluent limitations established by 40 CFR Part 423.

O.4 Additional Technology-Based Effluent Limits. The following good housekeeping measures are required in addition to Part III.B.1.b.ii:

O.4.1 *Fugitive Dust Emissions.* Minimize fugitive dust emissions from coal handling areas. To minimize the tracking of coal dust offsite, consider procedures such as installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water.

O.4.2 *Delivery Vehicles.* Minimize contamination of stormwater runoff from delivery vehicles arriving at the plant site. Consider procedures to inspect delivery vehicles arriving at the plant site and ensure overall integrity of the body or container and procedures to deal with leakage or spillage from vehicles or containers.

O.4.3 *Fuel Oil Unloading Areas.* Minimize contamination of precipitation or surface runoff from fuel oil unloading areas. Consider using containment curbs in unloading areas, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and using spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

O.4.4 *Chemical Loading and Unloading.* Minimize contamination of precipitation or surface runoff from chemical loading and unloading areas. Consider using containment curbs at chemical loading and unloading

areas to contain spills, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and loading and unloading in covered areas and storing chemicals indoors.

O.4.5 *Miscellaneous Loading and Unloading Areas.* Minimize contamination of precipitation or surface runoff from loading and unloading areas. Consider covering the loading area; grading, berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

O.4.6 *Liquid Storage Tanks.* Minimize contamination of surface runoff from above-ground liquid storage tanks. Consider protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.

O.4.7 *Large Bulk Fuel Storage Tanks.* Minimize contamination of surface runoff from large bulk fuel storage tanks. Consider containment berms (or their equivalent). You must also comply with applicable State and Federal laws, including Spill Prevention, Control and Countermeasure (SPCC) Plan requirements.

O.4.8 *Spill Reduction Measures.* Minimize the potential for an oil or chemical spill, or reference the appropriate part of your SPCC plan. Visually inspect as part of your routine facility inspection the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater, and make any necessary repairs immediately.

O.4.9 *Oil-Bearing Equipment in Switchyards.* Minimize contamination of surface runoff from oil-bearing equipment in switchyard areas. Consider using level grades and gravel surfaces to retard flows and limit the spread of spills, or collecting runoff in perimeter ditches.

O.4.10 *Residue-Hauling Vehicles.* Inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. Repair vehicles as soon as identified that are without load covering or adequate gate sealing, or with leaking containers or beds and prior to allowing them to transfer material.

O.4.11 *Ash Loading Areas.* Reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.

O.4.12 *Areas Adjacent to Disposal Ponds or Landfills.* Minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills. Reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.

O.4.13 *Landfills, Scrap yards, Surface Impoundments, General Refuse Sites.* Minimize the potential for contamination of runoff from these areas.

O.5 Additional SWPPP Requirements.

O.5.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).

O.5.2 *Documentation of Good Housekeeping Measures.* You must document in your SWPPP the good housekeeping measures implemented to meet the effluent limits in Part O.4.

O.6 Additional Inspection Requirements.

O.6.1 *Comprehensive Site Compliance Inspection.* (See also Part V.A) As part of your inspection, inspect the following areas monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

O.7 Intentionally Left Blank

O.8 Effluent Limitations Based on Effluent Limitations Guidelines.
Discharges from coal storage piles at Steam Electric Generating Facilities are required to meet specific effluent limits (40 CFR Part 423) and are therefore not covered by this permit. You must obtain an individual discharge permit to discharge this type of effluent.

Sector P – Land Transportation and Warehousing.

P.1 Covered Stormwater Discharges.

The requirements in Sector P apply to stormwater discharges associated with industrial activity from Land Transportation and Warehousing facilities as identified by the SIC Codes specified under Sector P in Appendix A of the permit.

P.2 Limitation on Coverage.

P.2.1 *Prohibited Discharges* (See also Part I.C Limitations on Coverage) This permit does not authorize the discharge of vehicle/equipment/surface washwater, including tank cleaning operations. Such discharges must be authorized under a separate NPDES/State discharge permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or recycled on-site.

P.3 Additional Technology-Based Effluent Limits.

P.3.1 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii) In addition to the Good Housekeeping requirements in Part III.B.1, you must do the following. Recommended control measures are discussed as indicated:

P.3.1.1 *Vehicle and Equipment Storage Areas.* Minimize the potential for stormwater exposure to leaky or leak-prone vehicles/equipment awaiting maintenance. Consider the following (or other equivalent measures): use of drip pans under vehicles/equipment, indoor storage of vehicles and equipment, installation of berms or dikes, use of absorbents, roofing or covering storage areas, and cleaning pavement surfaces to remove oil and grease.

P.3.1.2 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Consider the following (or other equivalent measures): Covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing stormwater run-on/runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.

P.3.1.3 *Material Storage Areas.* Maintain all material storage vessels (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of stormwater and plainly label them (e.g., “Used Oil,” “Spent Solvents,” etc.). Consider the following (or other equivalent measures): storing the materials indoors; installing berms/dikes around the areas; minimizing runoff of stormwater to the areas; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.

P.3.1.4 *Vehicle and Equipment Cleaning Areas.* Minimize contamination of stormwater runoff from all areas used for vehicle/equipment cleaning. Consider the following (or other equivalent measures): performing all cleaning operations indoors; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the stormwater drainage system); treating and/or recycling collected washwater, or other equivalent measures.

P.3.1.5 *Vehicle and Equipment Maintenance Areas.* Minimize contamination of stormwater runoff from all areas used for vehicle/equipment maintenance. Consider the following (or other equivalent measures): performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to stormwater drainage systems; using dry cleanup methods; treating and/or recycling collected stormwater runoff, minimizing run on/runoff of stormwater to maintenance areas.

P.3.1.6 *Locomotive Sanding (Loading Sand for Traction) Areas.* Consider the following (or other equivalent measures): covering sanding areas; minimizing stormwater run on/runoff; or appropriate sediment removal practices to minimize the offsite transport of sanding material by stormwater.

P.3.2 *Employee Training.* (See also Part III.B.1.b.ix) Train personnel at least once a year and address the following activities, as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

P.4 Additional SWPPP Requirements.

P.4.1 *Drainage Area Site Map.* (See also Part III.C.2) Identify in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: Fueling stations; vehicle/equipment maintenance or cleaning areas; storage areas for vehicle/equipment with actual or potential fluid leaks; loading/unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas.

P.4.2 *Potential Pollutant Sources.* (See also Part III.C.3) Assess the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: Onsite waste storage or disposal; dirt/gravel parking areas for vehicles awaiting maintenance; illicit plumbing connections between shop floor drains and the stormwater conveyance system(s); and fueling areas. Describe these activities in the SWPPP.

P.4.3 *Description of Good Housekeeping Measures.* You must document in your SWPPP the good housekeeping measures you implement consistent with Part P.3.

P.4.4 *Vehicle and Equipment Washwater Requirements.* (See also Part III.C.3.d: Non-Stormwater Discharges) If applicable, attach to or reference in your SWPPP, a copy of the NPDES/State discharge permit issued for vehicle/equipment washwater or, if an NPDES/ State discharge permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, attach a copy to your SWPPP. In any case, implement all non-stormwater discharge permit conditions or pretreatment conditions in your SWPPP. If washwater is handled in another manner (e.g., hauled offsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in the plan.

P.5 Additional Inspection Requirements. (See also Part V.A) Inspect all the following areas/activities: storage areas for vehicles/equipment awaiting maintenance, fueling areas, indoor and outdoor vehicle/equipment maintenance areas, material storage areas, vehicle/equipment cleaning areas and loading/unloading areas.

Sector Q – Water Transportation.

Q.1 Covered Stormwater Discharges.

The requirements in Sector Q apply to stormwater discharges associated with industrial activity from Water Transportation facilities as identified by the SIC Codes specified under Sector Q in Appendix A of the permit. Note that marinas (SIC 4493) are covered by a separate general permit, Maryland General Permit No. 10-MA or replacement.

Q.2 Limitations on Coverage.

Q.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage) Not covered by this permit: bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels.

Q.3 Additional Technology-Based Effluent Limits.

Q.3.1 *Good Housekeeping Measures.* You must implement the following good housekeeping measures in addition to the requirements of Part III.B.1.b.ii:

Q.3.1.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate NPDES/State discharge permit. Collect or contain the discharges from the pressures washing area so that they are not co-mingled with stormwater discharges authorized by this permit.

Q.3.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. Consider containing all blasting and painting activities or use other measures to minimize the discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.

Q.3.1.3 *Material Storage Areas.* Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. Specify which materials are stored indoors, and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

Q.3.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the maintenance area.

Q.3.1.5 *Material Handling Area.* Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of stormwater to material handling areas.

Q.3.1.6 *Drydock Activities.* Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following

removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding and making absorbent materials and oil containment booms readily available to clean up or contain any spills.

Q.3.2 *Employee Training.* (See also Part III.B.1.b.ix) As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

Q.3.3 *Preventive Maintenance.* (See also Part III.B.1.b.iii) As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

Q.4 Additional SWPPP Requirements.

Q.4.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

Q.4.2 *Summary of Potential Pollutant Sources.* (See also Part III.C.3) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

Q.5 Additional Inspection Requirements.

(See also Part V.A) Include the following in all quarterly routine facility inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

Q.6 Intentionally Left Blank

Sector R – Ship and Boat Building and Repair Yards.

R.1 Covered Stormwater Discharges.

The requirements in Sector R apply to stormwater discharges associated with industrial activity from Ship and Boat Building and Repair Yards as identified by the SIC Codes specified under Sector R in Appendix A of the permit.

R.2 Limitations on Coverage.

R.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage) Discharges containing bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels are not covered by this permit.

R.3 Additional Technology-Based Effluent Limits.

R.3.1 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii)

R.3.1.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharged water must be permitted as a process wastewater by a separate NPDES/State discharge permit.

R.3.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharging into the receiving water or the storm sewer systems. Consider containing all blasting and painting activities, or use other measures to prevent the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.

R.3.1.3 *Material Storage Areas.* Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

R.3.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the maintenance area.

R.3.1.5 *Material Handling Area.* Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing stormwater run-on to material handling areas.

R.3.1.6 *Drydock Activities.* Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, or fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding, and having absorbent materials and oil containment booms readily available to clean up and contain any spills.

R.3.2 *Employee Training.* (See also Part III.B.1.b.ix) As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

R.3.4 *Preventive Maintenance.* (See also Part III.B.1.b.iii) As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

R.4 Additional SWPPP Requirements.

R.4.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance or repair; vessel maintenance or repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; treatment, storage, and waste disposal areas; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

R.4.2 *Potential Pollutant Sources.* (See also Part III.C.3) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting).

R.4.3 *Documentation of Good Housekeeping Measures.* Document in your SWPPP any good housekeeping measures implemented to meet the effluent limits in Part R.3.

R.4.3.1 *Blasting and Painting Areas.* Document in the SWPPP any standard operating practices relating to blasting and painting (e.g., prohibiting uncontained blasting and painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).

R.4.3.2 *Storage Areas.* Specify in your SWPPP which materials are stored indoors, and consider containment or enclosure for those stored outdoors.

R.5 Additional Inspection Requirements.

(See also Part V.A) Include the following in all quarterly routine facility inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

Sector S – Air Transportation.

S.1 Covered Stormwater Discharges.

The requirements in Sector S apply to stormwater discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes specified under Sector S in Appendix A of the permit.

S.2 Limitation on Coverage

S.2.1 *Limitations on Coverage.*

S.2.1.1 This permit authorizes stormwater discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations.

Note: “deicing” will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

S.2.1.2 Existing and new primary airports with 1,000 or more annual jet departures ("non-propeller aircraft") that generate wastewater associated with airfield pavement deicing using urea-containing deicers must meet a numeric effluent limits for ammonia and are therefore not covered under this general permit.

S.2.2 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage and Part S.3) This permit does not authorize the discharge of aircraft, ground vehicle, runway and equipment washwaters; nor the dry weather discharge of deicing chemicals. Such discharges must be covered by separate NPDES/ State discharge permit(s). Note that a discharge resulting from snowmelt is not a dry weather discharge.

S.3 Additional Technology-Based Effluent Limits.

S.3.1 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii)

S.3.1.1 Aircraft, Ground Vehicle and Equipment Maintenance Areas. Minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.

S.3.1.2 Aircraft, Ground Vehicle and Equipment Cleaning Areas. (See also Part S.3.6) Clearly demarcate these areas on the ground using signage or other appropriate means. Minimize the contamination of stormwater runoff from cleaning areas.

S.3.1.3 Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of stormwater runoff from these storage areas. Consider the following control measures, including any BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

S.3.1.4 Material Storage Areas. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of stormwater. Also plainly label the vessels (e.g., “used oil,” “Contaminated Jet A,” etc.). Minimize contamination of precipitation/runoff from these areas. Consider the following control measures (or their

equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms/dikes around storage areas.

S.3.1.5 Airport Fuel System and Fueling Areas. Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following control measures (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using only dry cleanup methods; and collecting stormwater runoff.

S.3.1.6 Source Reduction. Minimize, and where feasible eliminate, the use of urea and glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.

S.3.1.6.1 Runway Deicing Operation: Minimize contamination of stormwater runoff from runways as a result of deicing operations. Evaluate whether over-application of deicing chemicals occurs by analyzing application rates, and adjust as necessary, consistent with considerations of flight safety. Also consider these control measure options (or their equivalents): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup.

S.3.1.6.2 Aircraft Deicing Operations. Minimize contamination of stormwater runoff from aircraft deicing operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. This evaluation should be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the airport authority). Consider using alternative deicing/anti-icing agents as well as containment measures for all applied chemicals. Also consider these control measure options (or their equivalents) for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.

S.3.1.7 Management of Runoff. (See also Part III.C.4) Where deicing operations occur, implement a program to control or manage contaminated runoff to minimize the amount of pollutants being discharged from the site. Consider these control measure options (or their equivalents): a dedicated deicing facility with a runoff collection/ recovery system; using vacuum/collection trucks; storing contaminated stormwater/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. Also consider recovering deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.

S.3.2 *Deicing Season.* You must determine the seasonal timeframe (e.g., December- February, October - March, etc.) during which deicing activities typically occur at the facility. Implementation of control measures, including any BMPs, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season.

S.4 Additional SWPPP Requirements.

An airport authority and tenants of the airport are encouraged to work in partnership in the development of a SWPPP. If an airport tenant obtains authorization under this permit and develops a SWPPP for discharges

from his own areas of the airport, prior to authorization, that SWPPP must be coordinated and integrated with the SWPPP for the entire airport. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity.

S.4.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

S.4.2 *Potential Pollutant Sources.* (See also Part III.C.3) In your inventory of exposed materials, describe in your SWPPP the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If you use deicing chemicals, you must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of your knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion with any comprehensive airport SWPPPs.

S.4.3 *Vehicle and Equipment Washwater Requirements.* Attach to or reference in your SWPPP, a copy of the NPDES/State discharge permit issued for vehicle/equipment washwater or, if an NPDES/State discharge permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, include a copy in your SWPPP. In any case, if you are subject to another permit, describe your control measures for implementing all non-stormwater discharge permit conditions or pretreatment requirements in your SWPPP. If washwater is handled in another manner (e.g., hauled offsite, retained onsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in your SWPPP.

S.4.4 *Documentation of Control Measures Used for Management of Runoff:* Document in your SWPPP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow.

S.5 Additional Inspection Requirements.

S.5.1 *Inspections.* (See also Part V.A) At a minimum conduct routine facility inspections at least monthly during the deicing season (e.g., October through April for most mid-latitude airports). If your facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. The Director may specifically require you to increase inspection frequencies.

S.5.2 *Comprehensive Site Inspections.* (See also Part V.A) Using only qualified personnel, conduct your annual site inspection during periods of actual deicing operations, if possible. If not practicable during active deicing because of weather, conduct the inspection during the season when deicing operations occur and the materials and equipment for deicing are in place.

S.6 Intentionally Left Blank

Sector T – Treatment Works.

T.1 Covered Stormwater Discharges.

The requirements in Sector T apply to stormwater discharges associated with industrial activity from Treatment Works as identified by the Activity Code specified under Sector T in Appendix A of the permit.

T.2 Industrial Activities Covered by Sector T.

The requirements listed under this part apply to all existing point source stormwater discharges associated with the following activities:

T.2.1 Treatment works treating domestic sewage, or any other sewage sludge or wastewater treatment device or system used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge; that are located within the confines of a facility with a design flow of 1.0 million gallons per day (MGD) or more; or are required to have an approved pretreatment program under 40 CFR Part 403.

T.2.2 The following are not required to have permit coverage: farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located within the facility, or areas that are in compliance with Section 405 of the CWA.

T.3 Limitations on Coverage.

T.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage) Sanitary and industrial wastewater and equipment and vehicle washwater are not authorized by this permit.

T.4 Additional Technology-Based Effluent Limits.

T.4.1 *Control Measures.* (See also Part III.C.4) In addition to the other control measures, consider the following: routing stormwater to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).

T.4.2 *Employee Training.* (See also Part III.B.1.b.ix) At a minimum, training must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

T.5 Additional SWPPP Requirements.

T.5.1 *Site Map.* (See also Part III.C.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.

T.5.2 *Potential Pollutant Sources.* (See also Part III.C.3) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.

T.5.3 *Wastewater and Washwater Requirements.* Keep a copy of all your current NPDES/ State discharge permits issued for wastewater and industrial, vehicle and equipment washwater discharges or, if an NPDES/ State discharge permit has not yet been issued, a copy of the pending application(s) with your SWPPP. If the washwater is handled in another manner, the disposal method must be described and all pertinent documentation must be retained onsite.

T.6 Additional Inspection Requirements.

(See also Part V.A) Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

Sector U – Food and Kindred Products.

U.1 Covered Stormwater Discharges.

The requirements in Sector U apply to stormwater discharges associated with industrial activity from Food and Kindred Products facilities as identified by the SIC Codes specified in Appendix A of the permit.

U.2 Limitations on Coverage.

U.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage) The following discharges are not authorized by this permit: discharges containing boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging, and vehicle washing and clean-out operations.

U.3 Additional Technology-Based Limitations.

U.3.1 *Employee Training.* (See also Part III.B.1.b.ix) Address pest control in your employee training program.

U.4 Additional SWPPP Requirements.

U.4.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP the locations of the following activities if they are exposed to precipitation or runoff: vents and stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

U.4.2 *Potential Pollutant Sources.* (See also Part III.C.3) Document in your SWPPP, in addition to food and kindred products processing-related industrial activities, application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides) used on plant grounds.

U.5 Additional Inspection Requirements.

(See also Part V.A) Inspect on a quarterly basis, at a minimum, the following areas where the potential for exposure to stormwater exists: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

U.6 Sector-Specific Benchmarks

These tables are for two subsectors of Food and Kindred Products. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table 7 - Subsector U1. Grain Mill Products (SIC 2041-2048)

PARAMETER	Benchmark	Units	Frequency	Sample Type
Total Suspended Solids (TSS)	100	mg/L	1/quarter	Grab

Table 8 - Subsector U2. Fats and Oils Products (SIC 2074-2079)

PARAMETER	Benchmark	Units	Frequency	Sample Type
Biochemical Oxygen Demand (BOD_5)	30	mg/L	1/quarter	Grab
Chemical Oxygen Demand (COD)	120	mg/L	1/quarter	Grab
Nitrate plus Nitrite Nitrogen	0.68	mg/L	1/quarter	Grab
Total Suspended Solids (TSS)	100	mg/L	1/quarter	Grab

Sector V – Textile Mills, Apparel, and Other Fabric Products.

V.1 Covered Stormwater Discharges.

The requirements in Sector V apply to stormwater discharges associated with industrial activity from Textile Mills, Apparel, and Other Fabric Product manufacturing as identified by the SIC Codes specified under Sector V in Appendix A of the permit.

V.2 Limitations on Coverage.

V.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part I.C Limitations on Coverage) The following are not authorized by this permit: discharges of wastewater (e.g., wastewater resulting from wet processing or from any processes relating to the production process), reused or recycled water, and waters used in cooling towers. If you have these types of discharges from your facility, you must cover them under a separate NPDES/State discharge permit.

V.3 Additional Technology-Based Limitations.

V.3.1 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii)

V.3.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., fuels, petroleum products, solvents, and dyes) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances. For storing empty chemical drums or containers, ensure that the drums and containers are clean (consider triple-rinsing) and that there is no contact of residuals with precipitation or runoff. Collect and dispose of washwater from these cleanings properly.

V.3.1.2 *Material Handling Areas.* Minimize contamination of stormwater runoff from material handling operations and areas. Consider the following (or their equivalents): use of spill and overflow protection; covering fueling areas; and covering or enclosing areas where the transfer of material may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals, dyes, or wastewater.

V.3.1.3 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing run-on of stormwater to the fueling areas, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the fueling area.

V.3.1.4 *Above-Ground Storage Tank Area.* Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regular cleanup of these areas; including measures for tanks, piping and valves explicitly in your SPCC program; minimizing runoff of stormwater from adjacent areas; restricting access to the area; inserting filters in adjacent catch basins; providing absorbent booms in unbermed fueling areas; using dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.

V.3.2 *Employee Training.* (See also Part III.B.1.b.ix) As part of your employee training program, address, at a minimum, the following activities (as applicable): use of reused and recycled waters, solvents management, proper disposal of dyes, proper disposal of petroleum products and spent lubricants, spill prevention and control, fueling procedures, and general good housekeeping practices.

V.4 Additional SWPPP Requirements.

V.4.1 *Potential Pollutant Sources. (See also Part III.C.3) Document in your SWPPP the following additional sources* and activities that have potential pollutants associated with them: industry-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing bonding, carbonizing, carding, cut and

sew operations, desizing, drawing, dyeing locking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing).

V.4.2 *Description of Good Housekeeping Measures for Material Storage Areas.* Document in the SWPPP your containment area or enclosure for materials stored outdoors in connection with Part V.3.1.1 above.

V.5 Additional Inspection Requirements.

(See also Part V.A) Inspect, at least monthly, the following activities and areas (at a minimum): transfer and transmission lines, spill prevention, good housekeeping practices, management of process waste products, and all structural and nonstructural management practices.

Sector W – Furniture and Fixtures.

W.1 Covered Stormwater Discharges.

The requirements in Sector W apply to stormwater discharges associated with industrial activity from Furniture and Fixtures facilities as identified by the SIC Codes specified under Sector W in Appendix A of the permit.

W.2 Additional SWPPP Requirements.

W.2.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed of; access roads; and rail spurs.

Sector X – Printing and Publishing.

X.1 Covered Stormwater Discharges.

The requirements in Sector X apply to stormwater discharges associated with industrial activity from Printing and Publishing facilities as identified by the SIC Codes specified under Sector X in Appendix A of the permit.

X.2 Additional Technology-Based Effluent Limits.

X.2.1 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii)

X.2.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, hazardous waste, empty drums, portable and mobile containers of plant debris, wood crates, steel racks, and fuel oil) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances.

X.2.1.2 *Material Handling Area.* Minimize contamination of stormwater runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials). Consider the following (or their equivalents): using spill and overflow protection, covering fueling areas, and covering or enclosing areas where the transfer of materials may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.

X.2.1.3 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing runoff of stormwater to the fueling areas, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the fueling area.

X.2.1.4 *Above Ground Storage Tank Area.* Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regularly cleaning these areas, explicitly addressing tanks, piping and valves in the SPCC program, minimizing stormwater runoff from adjacent areas, restricting access to the area, inserting filters in adjacent catch basins, providing absorbent booms in unbermed fueling areas, using dry cleanup methods, and permanently sealing drains within critical areas that may discharge to a storm drain.

X.2.2 *Employee Training.* (See also Part III.B.1.b.ix) As part of your employee training program, address, at a minimum, the following activities (as applicable): spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

X.3 Additional SWPPP Requirements.

X.3.1 *Description of Good Housekeeping Measures for Material Storage Areas.* In connection with Part X.2.1.1, describe in the SWPPP the containment area or enclosure for materials stored outdoors.

Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.

Y.1 Covered Stormwater Discharges.

The requirements in Sector Y apply to stormwater discharges associated with industrial activity from Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries facilities as identified by the SIC Codes specified under Sector Y in Appendix A of the permit.

Y.2 Additional Technology-Based Effluent Limits.

Y.2.1 *Controls for Rubber Manufacturers.* (See also Part III.C.4) Minimize the discharge of zinc in your stormwater discharges. Parts Y.2.1.1 to Y.2.1.5 give possible sources of zinc to be reviewed and list some specific control measures to be considered for implementation (or their equivalents). Following are some general control measure options to consider: using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring an airspace between the container and the cover to minimize "puffing" losses when the container is opened, and using automatic dispensing and weighing equipment.

Y.2.1.1 *Zinc Bags.* Ensure proper handling and storage of zinc bags at your facility. Following are some control measure options: employee training on the handling and storage of zinc bags, indoor storage of zinc bags, cleanup of zinc spills without washing the zinc into the storm drain, and the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks.

Y.2.1.2 *Dumpsters.* Minimize discharges of zinc from dumpsters. Following are some control measure options: covering the dumpster, moving the dumpster indoors, or providing a lining for the dumpster.

Y.2.1.3 *Dust Collectors and Baghouses.* Minimize contributions of zinc to stormwater from dust collectors and baghouses. Replace or repair, as appropriate, improperly operating dust collectors and baghouses.

Y.2.1.4 *Grinding Operations.* Minimize contamination of stormwater as a result of dust generation from rubber grinding operations. One control measure option is to install a dust collection system.

Y.2.1.5 *Zinc Stearate Coating Operations.* Minimize the potential for stormwater contamination from drips and spills of zinc stearate slurry that may be released to the storm drain. One control measure option is to use alternative compounds to zinc stearate.

Y.2.2 *Controls for Plastic Products Manufacturers.* Minimize the discharge of plastic resin pellets in your stormwater discharges. Control measures to be considered for implementation (or their equivalents) include minimizing spills, cleaning up of spills promptly and thoroughly, sweeping thoroughly, pellet capturing, employee education, and disposal precautions.

Y.3 Additional SWPPP Requirements.

Y.3.1 *Potential Pollutant Sources for Rubber Manufacturers.* (See also Part III.C.3) Document in your SWPPP the use of zinc at your facility and the possible pathways through which zinc may be discharged in stormwater runoff.

Y.4 Intentionally Left Blank

Sector Z – Leather Tanning and Finishing.

Z.1 Covered Stormwater Discharges.

The requirements in Sector Z apply to stormwater discharges associated with industrial activity from Leather Tanning and Finishing facilities as identified by the SIC Code specified under Sector Z in Appendix A of the permit.

Z.2 Additional Technology-Based Effluent Limits.

Z.2.3 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii)

Z.2.3.1 *Storage Areas for Raw, Semiprocessed, or Finished Tannery By-products.* Minimize contamination of stormwater runoff from pallets and bales of raw, semiprocessed, or finished tannery by-products (e.g., splits, trimmings, shavings). Consider indoor storage or protection with polyethylene wrapping, tarpaulins, roofed storage, etc. Consider placing materials on an impermeable surface and enclosing or putting berms (or equivalent measures) around the area to prevent stormwater run-on and runoff.

Z.2.3.2 *Material Storage Areas.* Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials) minimize contact of such materials with stormwater.

Z.2.3.3 *Buffing and Shaving Areas.* Minimize contamination of stormwater runoff with leather dust from buffing and shaving areas. Consider dust collection enclosures, preventive inspection and maintenance programs, or other appropriate preventive measures.

Z.2.3.4 *Receiving, Unloading, and Storage Areas.* Minimize contamination of stormwater runoff from receiving, unloading, and storage areas. If these areas are exposed, consider the following (or their equivalents): covering all hides and chemical supplies, diverting drainage to the process sewer, or grade berming or curbing the area to prevent stormwater runoff.

Z.2.3.5 *Outdoor Storage of Contaminated Equipment.* Minimize contact of stormwater with contaminated equipment. Consider the following (or their equivalents): covering equipment, diverting drainage to the process sewer, and cleaning thoroughly prior to storage.

Z.2.3.6 *Waste Management.* Minimize contamination of stormwater runoff from waste storage areas. Consider the following (or their equivalents): covering dumpsters, moving waste management activities indoors, covering waste piles with temporary covering material such as tarpaulins or polyethylene, and minimizing stormwater runoff by enclosing the area or building berms around the area.

Z.3 Additional SWPPP Requirements.

Z.3.1 *Drainage Area Site Map.* (See also Part III.C.2) Identify in your SWPPP where any of the following may be exposed to precipitation or surface runoff: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and dry finishing operations.

Z.3.2 *Potential Pollutant Sources.* (See also Part III.C.3) Document in your SWPPP the following sources and activities that have potential pollutants associated with them (as appropriate): temporary or permanent storage of fresh and brine-cured hides; extraneous hide substances and hair; leather dust, scraps, trimmings, and shavings.

Sector AA – Fabricated Metal Products.

AA.1 Covered Stormwater Discharges.

The requirements in Sector AA apply to stormwater discharges associated with industrial activity from Fabricated Metal Products facilities as identified by the SIC Codes specified under Sector AA in Appendix A of the permit.

AA.2 Additional Technology-Based Effluent Limits.

AA.2.1 *Good Housekeeping Measures.* (See also Part III.B.1.b.ii)

AA.2.1.1 *Raw Steel Handling Storage.* Minimize the generation of and/or recover and properly manage scrap metals, fines, and iron dust. Include measures for containing materials within storage handling areas.

AA.2.1.2 *Paints and Painting Equipment.* Minimize exposure of paint and painting equipment to stormwater.

- Conduct outdoor painting over a suitable groundcover (i.e., tarp) to capture any residuals.
- Paint mixing, solvent transfer, and equipment clean up operations must be contained, and shall not enter floor or storm drains or the environment.

AA.2.2 *Spill Prevention and Response Procedures.* (See also Part III.B.1.b.iv) Ensure that the necessary equipment to implement a cleanup is available to personnel, so that immediate clean-up is possible. The following areas should be addressed

AA.2.2.1 *Metal Fabricating Areas.* Maintain clean, dry, orderly conditions in these areas. Consider using dry clean-up techniques.

AA.2.2.2 *Storage Areas for Raw Metal.* Keep these areas free of conditions that could cause, or impede appropriate and timely response to, spills or leakage of materials. Consider the following (or their equivalents): maintaining storage areas so that there is easy access in the event of a spill, and labeling stored materials to aid in identifying spill contents.

AA.2.2.3 *Metal Working Fluid Storage Areas.* Minimize the potential for stormwater contamination from storage areas for metal working fluids.

AA.2.2.4 *Cleaners and Rinse Water.* Control and clean up spills of solvents and other liquid cleaners, control sand buildup and disbursement from sand-blasting operations, and prevent exposure of recyclable wastes. Substitute environmentally benign cleaners when possible.

AA.2.2.5 *Lubricating Oil and Hydraulic Fluid Operations.* Minimize the potential for stormwater contamination from lubricating oil and hydraulic fluid operations. Consider using monitoring equipment or other devices to detect and control leaks and overflows. Consider installing perimeter controls such as dikes, curbs, grass filter strips, or equivalent measures.

AA.2.2.6 *Chemical Storage Areas.* Minimize stormwater contamination and accidental spillage in chemical storage areas. Include a program to inspect containers and identify proper disposal methods.

AA.2.2.7 *Blasting Operations.* Capture airborne particles by performing operations inside permanent structures or temporary protective measures such as drop cloths and shrouding secured around the activity. A suitable ground cover (i.e., tarp, rubber mat) should be placed under activity area in order to collect any debris, followed by proper disposal, to minimize potential to minimize stormwater contamination.

AA.2.3 *Spills and Leaks.* (See also Part III.C.3.c) In your spill prevention and response procedures, required by Part III.B.1.b.iv, pay attention to the following materials (at a minimum): chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes.

AA.3 Additional SWPPP Requirements.

AA.3.1 *Drainage Area Site Map.* (See also Part III.C.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: raw metal storage areas; finished metal storage areas; scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary and permanent diversion dikes or berms; right-of-way or perimeter diversion devices; sediment traps and barriers; processing areas, including outside painting areas; wood preparation; recycling; and raw material storage.

AA.3.2 *Potential Pollutant Sources.* (See also Part III.C.3) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them: loading and unloading operations for paints, chemicals, and raw materials; outdoor storage activities for raw materials, paints, empty containers, corn cobs, chemicals, and scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, and brazing; onsite waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingot pieces, and refuse and waste piles.

AA.4 Additional Inspection Requirements

AA.4.1 *Inspections.* (See also Part V.A) At a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, and vehicle fueling and maintenance areas.

AA.4.2 *Comprehensive Site Inspections.* (See also Part V.A) As part of your inspection, also inspect areas associated with the storage of raw metals, spent solvents and chemicals storage areas, outdoor paint areas, and drainage from roof. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and related materials.

AA.5 Sector-Specific Benchmarks.

Table 9 - Sector AA Benchmarks (Fabricated Metal Products)

PARAMETER	Benchmark	Units	Frequency	Sample Type
Nitrate plus Nitrite Nitrogen	0.68	mg/L	1/quarter	Grab
Total Zinc[1]	0.12	mg/L	1/quarter	Grab

[1] The benchmark values of some metals are dependent on water hardness. For these parameters, you must determine the hardness of the receiving water per Appendix C.

Sector AB – Transportation Equipment, Industrial or Commercial Machinery Facilities.

AB.1 Covered Stormwater Discharges.

The requirements in Sector AB apply to stormwater discharges associated with industrial activity from Transportation Equipment, Industrial or Commercial Machinery facilities as identified by the SIC Codes specified under Sector AB in Appendix A of the permit.

AB.2 Additional SWPPP Requirements.

Drainage Area Site Map. (See also Part III.C.2) Identify in your SWPPP where any of the following may be exposed to precipitation or surface runoff: vents and stacks from metal processing and similar operations.

Sector AC –Electronic and Electrical Equipment and Components, Photographic and Optical Goods.

AC.1 Covered Stormwater Discharges.

No additional requirements apply to stormwater discharges associated with industrial activity from facilities that manufacture Electronic and Electrical Equipment and Components, Photographic and Optical goods as identified by the SIC Codes specified in Appendix A of the permit.

Sector AD.a – Department of Public Works and Highway Maintenance Facilities.

AD.a.1 Covered Stormwater Discharges.

The requirements are for the fleet and equipment maintenance at Public Works and Highway Maintenance Operations in Sector AD.a apply to stormwater discharges associated with industrial activity from Department of Public Works and Highway Maintenance facilities as identified by the SIC Codes specified under Sector AD.a in Appendix A of the permit.

AD.a.2 Additional SWPPP Requirements.

In addition to the requirements of Part III, the SWPPP shall include, at a minimum, the requirements listed for Sector P - Land Transportation and Warehousing.

Sector AD.b – School Bus Maintenance Facilities.

AD.b.1 Covered Stormwater Discharges.

The requirements in Sector AD.b apply to stormwater discharges associated with industrial activity from School Bus Maintenance facilities as identified by the SIC Codes specified under Sector AD.b in Appendix A of the permit.

AD.b.2 Additional SWPPP Requirements.

In addition to the requirements of Part III, the SWPPP shall include, at a minimum, the requirements listed for Sector P - Land Transportation and Warehousing.

Sector AD – Stormwater Discharges Designated by the Department as Requiring Permits.

AD.1 Covered Stormwater Discharges.

Sector AD is used to provide permit coverage for facilities designated by the Department as needing a stormwater permit, and any discharges of stormwater associated with industrial activity that do not meet the description of an industrial activity covered by Sectors A-AC.

AD.1 *Eligibility for Permit Coverage.* Because this sector is primarily intended for use by discharges designated by the Department as needing a stormwater permit (which is an atypical circumstance), and your facility may or may not normally be discharging stormwater associated with industrial activity, you must obtain the Department's written permission to use this permit prior to submitting an NOI. If you are authorized to use this permit, you will still be required to ensure that your discharges meet the basic eligibility provisions in Part I of this permit.

AD.2 Sector-Specific Benchmarks and Effluent Limits. (See also Part V of the permit.)

The Department will establish any additional monitoring and reporting requirements for your facility prior to authorizing you to be covered by this permit. Additional monitoring requirements would be based on the nature of activities at your facility and your stormwater discharges.

Appendix E:
Definitions, Abbreviations and Acronyms

Accounting Guidance – 'Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated' dated June 2011, or its successor. This document may be found on the Department's Stormwater Management Program website or with this website link http://bit.ly/MDE_Accounting_Guidance, under Maryland's Stormwater Management Program. Industrial facilities may not consider section 9 of that document "Alternative BMPs for Consideration", which were alternative BMPs recommended by Maryland's NPDES municipalities for further examination by the Department.

Action Area – all areas to be affected directly or indirectly by the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities, and not merely the immediate area involved in these discharges and activities.

BAT – Best Available Technology Economically Achievable

Best Management Practices (BMPs) – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.

BOD5 – Biochemical Oxygen Demand (5-day test)

BPJ – Best Professional Judgment

BPT – Best Practicable Control Technology Currently Available

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CFR - Code of Federal Regulations

COD – Chemical Oxygen Demand

Co-located Industrial Activities – Any industrial activities, excluding your primary industrial activity(ies), located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified by the SIC code list in Appendix A.

COMAR - Code of Maryland Regulations

Control Measure – refers to any BMP or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the State.

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)

Department - the Maryland Department of the Environment. Unless stated otherwise, all submissions to the Department shall be directed to the attention of the Wastewater Permits Program.

Design Manual - the updated stormwater management principles, methods and practices found in the "Maryland Stormwater Design Manual, Volumes I & II (Design Manual)", which serves as the Department's guide for stormwater management principles, methods, and practices for new development, redevelopment, retrofits and restoration. Modifications were made to the Design Manual in 2009, to include Environmental Site Design (ESD) in addition to the established Best Management Practices (BMPs). The latest edition of the Design Manual is available on the Department's Stormwater Management Program website or with this website link http://bit.ly/MDE_Design_Manual.

Discharge – when used without qualification, means the "discharge of a pollutant." See 40 CFR 122.2.

Discharge of a pollutant – any addition of any "pollutant" or combination of pollutants to "waters of this State" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being

used as a means of transportation. This includes additions of pollutants into waters of this State from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

Discharge-related activities – activities that cause, contribute to, or result in stormwater and allowable non-stormwater point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce, or prevent pollution in the discharges.

DMR – Discharge Monitoring Report

Effluent limitation - any restriction or prohibition that:

1. Is established under federal law or a law of this State;
2. Specifies quantities, rates or concentrations of chemical, physical, biological, or other constituents that are discharged into the waters of this State;
3. Includes:
   a. Parameters for the discharge of toxic and nontoxic substances, and
   b. Standards of performance for new sources.

Effluent Limitations Guideline (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

EPA – U. S. Environmental Protection Agency

EPA Approved or Established Total Maximum Daily Loads (TMDLs) – "EPA Approved TMDLs" are those that are developed by a State and approved by EPA. "EPA Established TMDLs" are those that are developed by EPA.

Existing Discharger – an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.

Facility or Activity – any NPDES "point source" (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See 40 CFR 122.2.

General permit - a State discharge permit issued for a class of dischargers.

Grab sample - an individual sample collected in less than 15 minutes. Grab samples for pH shall be analyzed within 15 minutes of sample collection.

Groundwater - underground water in a zone of saturation.

Hardness Dependent - refers to benchmark values for some metals that are determined as a function of hardness (in units of mg/L) in water. For these parameters, permittees whose discharges exceed the lowest benchmark level of the metal must determine the hardness of the receiving water (see Appendix C), to identify the benchmark value applicable to their facility.

Hazardous Materials or Hazardous Substances or Hazardous or Toxic Waste – for the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.

Impaired Water (or "**Water Quality Impaired Water**") – a body of water identified by the Department or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established. Impaired waters compilations are included in Maryland's most current List of Impaired Surface Waters as Category 4a, 4b, 4c or 5 waterbodies.

Impervious surface - any surface that does not allow stormwater to infiltrate into the ground, including any area that is paved or used for vehicular storage or traffic, building rooftops, sidewalks, driveways, etc. The surfaces considered impervious for nutrient reduction requirements are further specified in Part III.A of the

permit.

Industrial Activity – the 10 categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined below and in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

Industrial Stormwater – stormwater runoff from industrial activity.

Infeasible – there is a site-specific constraint making it not technologically possible, or not economically practicable and achievable in light of best industry practices, to achievethe required control measures on-site. The burden is on the permittee to demonstrate to the permitting authority that the requirement is infeasible.

Leachate – liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

Measured flow - any method of liquid volume measurement; the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Minimize – to reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice

MGD – Million Gallons per Day

MSDS – Material Safety Data Sheet

MSGP – EPA's Multi-Sector General Permit

Municipal Separate Storm Sewer – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

1. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
2. Designed or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7).

Municipal Separate Storm Sewer System (MS4) – in Maryland we have several MS4 NPDES Permits. The following are a summary of how they are broken down by size. For a full listing and explanation, visit the Department website for "Maryland's NPDES Municipal Separate Storm Sewer System (MS4) Permits" or at this link http://bit.ly/MDE_MS4.

- Phase I MS4s are for large jurisdictions, which are municipalities with populations of greater than 250,000, amd medium jurisdictions, which are municiapalities with populations between 100,000 and 250,000. The large Phase I MS4 jurisdictions are Anne Arundel County, Baltimore County, Baltimore City, Montgomery County, and Prince George's County. The medium Phase I MS4 jurisdictions are Carroll County, Charles County, Frederick County, Harford County, and Howard County. One statewide MS4 under this category has been issued to the State Highway Administration.
- Phase II MS4s include smaller jurisdictions or approximately 60 cities and towns in Maryland with populations greater than 1,000. They also include State and Federal facilities.

NetDMR – a national tool for regulated Clean Water Act permittees to submit discharge monitoring reports (DMRs) electronically via a secure Internet application to U.S. EPA through the Environmental Information Exchange Network. NetDMR allows participants to discontinue mailing in hard copy forms under 40 CFR 122.41 and 403.12.

New Discharger – a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.

New Source – any source, the construction of which is commenced after the publication by the EPA of proposed regulations prescribing a standard of performance which will be applicable to the source if the standard is promulgated.

New Source Performance Standards (NSPS) – technology-based standards for facilities that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

No exposure – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

Non-Stormwater Discharges – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, noncontact cooling water, pavement wash water, external building washdown, irrigation water, or uncontaminated ground water or spring water.

Notice of Intent (NOI) – the form (electronic or paper) required for authorization of coverage under a General Permit.

Notice of Termination (NOT) – the form (electronic or paper) required for terminating coverage under a Permit.

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NSPS – New Source Performance Standard

NTU – Nephelometric Turbidity Unit

Operator – that person or those persons with responsibility for the management and performance of each facility.

Operator – any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:

1. The entity has operational control over industrial activities, including the ability to make modifications to those activities; or
2. The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

Outfall – locations where collected and concentrated stormwater flows are discharged from the facility, including pipes, ditches, swales, and other structures that transport stormwater.

Owner - a person who has a legal interest in the facility or in the property on which the facility is located, or the owner's agent.

Permittee - the person holding a permit issued by the Department, or authorized for coverage under a general permit by the department.

Person – an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See 40 CFR 122.2.

Point source – any discernible, confined and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, large animal feeding operation, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are, or may be, discharged.

Pollutant – dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR 122.2.

Pollutant of concern – A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.

Pollution – means any contamination or other alteration of the physical, chemical, or biological properties of any waters of this State, including a change in temperature, taste, color, turbidity, or odor of the waters or the discharge or deposit of any organic matter, harmful organism, or liquid, gaseous, solid, radioactive, or other substance into any waters of this State that will render the waters harmful, or detrimental, to:

(a) Public health, safety, or welfare;

(b) Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses;

(c) Livestock, wild animals, birds; or

(d) Fish or other aquatic life.

POTW – Publicly Owned Treatment Works

Primary industrial activity – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

Proprietary Practices – Stormwater controls approved through the Department's Review Process for New Technologies as described in the Department's 2005 Proprietary Stormwater Practice Guidance titled "Facts about ….Maryland's Stormwater Program & Proprietary Practices" found on the Departments website or at this link http://bit.ly/MDE_Proprietary_Practices.

Qualified Personnel – Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at your facility, and who can also evaluate the effectiveness of control measures.

RCRA – Resource Conservation and Recovery Act

Reportable Quantity Release – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 for complete definitions and reportable quantities for which notification is required.

Restoration of Impervious Surfaces – Treatment of untreated impervious surfaces with structural or non-structural stormwater management practices based upon designs that treat the volume from one inch of rainfall. Approved practices for industrial sites are identified in Part III.A of the permit.

RQ – Reportable Quantity

Runoff - that portion of stormwater that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, and the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the State.

Runoff coefficient – the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR 122.26(b)(11).

Run-on - water from outside the industrial stormwater area that flows into the area. Run-on includes stormwater from rainfall or the melting of snow or ice that falls directly on the unit, as well as the water that drains from adjoining areas.

SARA – Superfund Amendments and Reauthorization Act

Section 313 water priority chemical - a chemical or chemical categories that: 1) are listed at 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986; 2) are present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the Clean Water Act at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

SIC – Standard Industrial Classification

Significant materials – includes, but is 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 section 101(14) of CERCLA, commonly known as Superfund; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges. See 40 CFR 122.26(b)(12).

Significant spills - includes, but is not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (40 CFR 110.10 and 40 CFR 117.21) or Section 102 of CERCLA (40 CFR 302.4).

SPCC – Spill Prevention, Control, and Countermeasures

State discharge permit - the discharge permit issued under the Environment Article, Title 9, Subtitle 3, Annotated Code of Maryland.

Stormwater – stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

Stormwater Discharges Associated with Construction Activity – a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15) .

Stormwater Discharges Associated with Industrial Activity – the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings;

storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14). The term also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). See 40 CFR 122.26(b)(14).

Stormwater management – is, as described in the Design Manual, any

1. quantitative control, a system of vegetative and structural measures that control the increased volume and rate of surface runoff caused by man-made changes to the land; and
2. qualitative control, a system of vegetative, structural, and other measures that reduce or eliminate pollutants that might otherwise be carried by runoff.

Stormwater Team – the group of individuals responsible for oversight of the development and modifications of the SWPPP, and oversight of compliance with the permit requirements. The individuals on the "Stormwater Team" must be identified in the SWPPP.

Storm Event – a precipitation event that results in a measurable amount of precipitation.

Surface waters - all waters of this State which are not groundwaters.

SWPPP – Stormwater Pollution Prevention Plan

Tier 2 Waters – For antidegradation purposes, pursuant to 40 CFR 131.12(a)(2), Tier 2 waters are characterized as having water quality that exceeds the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.

Total Maximum Daily Loads (TMDLs) – A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

Treatment of Impervious Surfaces - Implementing the requirements for stormwater management as prescribed in the Department's "2000 Maryland Stormwater Design Manual, Volumes I & II" or the Design Manual for impervious area. The manual spells out both design and implementation requirements using appropriately sized Best Management Practices or Environmental Site Design, based upon designs that manage on-site the water quality volume (WQv) resulting from the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation.

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

USGS – United States Geological Survey

Wastewater - any:

1. liquid waste substance derived from industrial, commercial, municipal, residential, agricultural, recreational, or other operations or establishments; and
2. other liquid waste substance containing liquid, gaseous or solid matter and having characteristics that will pollute any waters of the State.

Water Quality Impaired – See 'Impaired Water'.

Water Quality Standards – A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. The Department as promulgated in COMAR 26.08.02 (http://www.dsd.state.md.us/comar/) and EPA adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (See CWA sections 101(a)2 and 303(c)). Water quality standards also include an antidegradation policy. See P.U.D. o. 1 of Jefferson County et al v. Wash Dept of Ecology et al, 511 US 701, 705 (1994).

Waters of the State – includes:

1. both surface and underground waters within the boundaries of this State subject to its jurisdiction, including that part of the Atlantic Ocean within the boundaries of this State, the Chesapeake Bay and its tributaries, and all ponds, lakes, rivers, streams, tidal and nontidal wetlands, public ditches, tax ditches, and public drainage systems within this State, other than those designed and used to collect, convey, or dispose of sanitary sewage; and
2. the flood plain of free-flowing waters determined by the Department of Natural Resources on the basis of the 100-year flood frequency.

WLA – Waste Load Allocation

"You" and "Your" – as used in this permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's facility or responsibilities. The use of "you" and "your" refers to a particular facility and not to all facilities operated by a particular entity. For example, "you must submit" means the permittee must submit something for that particular facility. Likewise, "all your discharges" would refer only to discharges at that one facility.

Appendix F:
Nutrient Reduction Progress Report

Nutrient Reduction Progress Report (Permit Condition Part III.A.3.b)

SECTION I: Facility Information

(A) Facility Name and Address:

(B) Registration Number:

12-SW- ☐

☐ ***Total facility size (acres)***

(C) Baseline information about facility (as of <u>January 1, 2006</u> or later)

☐ ***Total impervious surface area (square feet)***
☐ ***Untreated impervious surface area (square feet)***
☐ ***Impervious surface area subject to 20% restoration requirement (acres)***

(D) Control Measures Selected **Planned completion date** ☐

☐ ***Restored Impervious Surfaces (acres)***
☐ ***Accounting Guidance Practices (acres)***
☐ ***Sediment and Erosion Control (TN lbs/year)***
☐ ***Reduced fertilizer (TN lbs/year)***
☐ ***Reduced nitrogen to achieve benchmarks (TN lbs/year)***
☐ ***Reallocated TN load (TN lbs/year)***
☐ ***Were any of these control measures planned or completed off-site? (Yes or No)***
☐ ***Latest Comprehensive Site Compliance Evaluation (date)***

Brief Description of Restoration or other equivalent measures:

SECTION II: 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 gather and evaluate 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***
Signatory Name/Title: Typed or Printed	***Email Address or Phone Number***

SECTION I: Owner/Operator Information

(A) Provide the name, address and size (in acres) of the facility covered under the registration. This should match the information submitted in the NOI or reflect any changes in property size.

(B) Provide the registration number provided by the Department for your coverage under this permit. This number will start with 12SW, and end with 4 numbers (i.e. 12SW1234).

(C) This part provides the baseline data for requirements related to impervious surfaces.

Total impervious surface area in square feet is determined in Part III.A.2.a of the permit.

Untreated impervious surface area in square feet is determined in Part III.A.2.d of the permit.

Impervious surface area subject to 20% restoration requirement in acres is determined in Part III.A.2.e of the permit.

(D) This part provides the update on your restoration activities consistent with Part III.A.1.c or Part III.A.1.d.

- The planned completion date is based on your current best estimate of the restoration requirements of this permit. If all the work is complete, simply use the date of completion.
- The practices listed are the options provided in the permit. Simply indicate here the amount of work under each control measure you have planned or implemented.

  Restored Impervious Surfaces are control measures in either the Design Manual or Proprietary Practices (Part III.A.1.c.i) you have selected to meet the 20% restoration requirement. This is reported in acres of impervious surface treated.

  Accounting Guidance Practices are control measures in the Accounting Guidance (Part III.A.1.c.ii) you have selected to meet the 20% restoration requirement. This is reported in acres of impervious surface treated.

  Sediment and Erosion Control is one of the new equivalent control measures (Part III.A.1.c.iii) you have implemented to meet the requirements of this permit, with the calculated reduction in Total Nitrogen (TN) in lbs/year.

  Reduced fertilizer is one of the new equivalent control measures (Part III.A.1.c.iii) you have implemented to meet the requirements of this permit, with the calculated reduction in Total Nitrogen (TN) in lbs/year.

  Reduced nitrogen to achieve benchmarks is one of the new equivalent control measures (Part III.A.1.c.iii) you have implemented to meet the requirements of this permit, with the calculated reduction in Total Nitrogen (TN) in lbs/year.

  Reallocated TN load is one of the new equivalent control measures (Part III.A.1.c.iii) you have implemented to meet the requirements of this permit, with the calculated reduction in Total Nitrogen (TN) in lbs/year.

  Off-site work should be acknowledged by indicating Yes if any work was performed off-site to mee the permit requirements, or indicate No if it was all performed at your site. (Part III.A.1.d)

  Provide the date of the **Latest Comprehensive Site Compliance Evaluation** (Part V.A.2)

- Brief description section should be a high level description of tasks related to the remaining surfaces yet to be restored. Include a summary of each area on-site being treated, including the treatment strategy you will employ. Include types of BMPs implemented, and describe any equivalent measures you employed. Confirm if all work was performed at your facility or off-site.

- Indicate the last report date Comprehensive Site Compliance Evaluation Report, under Part V.A.2, which includes an evaluation of your restoration BMPs and verifies your maintenance activities.

SECTION II: Certification

To be completed by as detailed in Part II.C of the permit. An original signature and date is required. Your contact information is essential so that if the Department has questions they can contact you.

HOW TO SUBMIT:

You must ensure that the form is completely filled out. Completed reports should be sent to**:** **Maryland Department of the Environment, Wastewater Permits Program, 1800 Washington Blvd, Ste 455, Baltimore, MD 21230.**

APPENDIX C

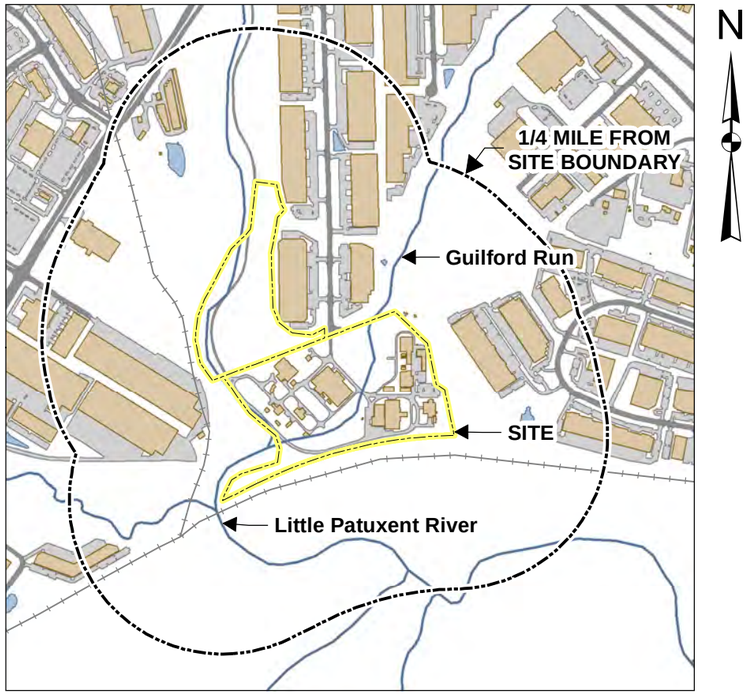
POLLUTION PREVENTION TEAM

APPENDIX D

FACILITY MAPS

STORMWATER POLLUTION PREVENTION PLAN
HOWARD COUNTY
LITTLE PATUXENT WATER RECLAMATION PLANT

SAVAGE, MARYLAND
JUNE 2014



2,000 1,000 0 2,000

GRAPHIC SCALE IN FEET

DRAWING NO.	SHEET NO.	DRAWING TITLE
TS-1	1	TITLE SHEET
A-1	2	AERIAL MAP
S-1	3	SITE MAP
S-1a	3a	SITE MAP A
S-1b	3b	SITE MAP B

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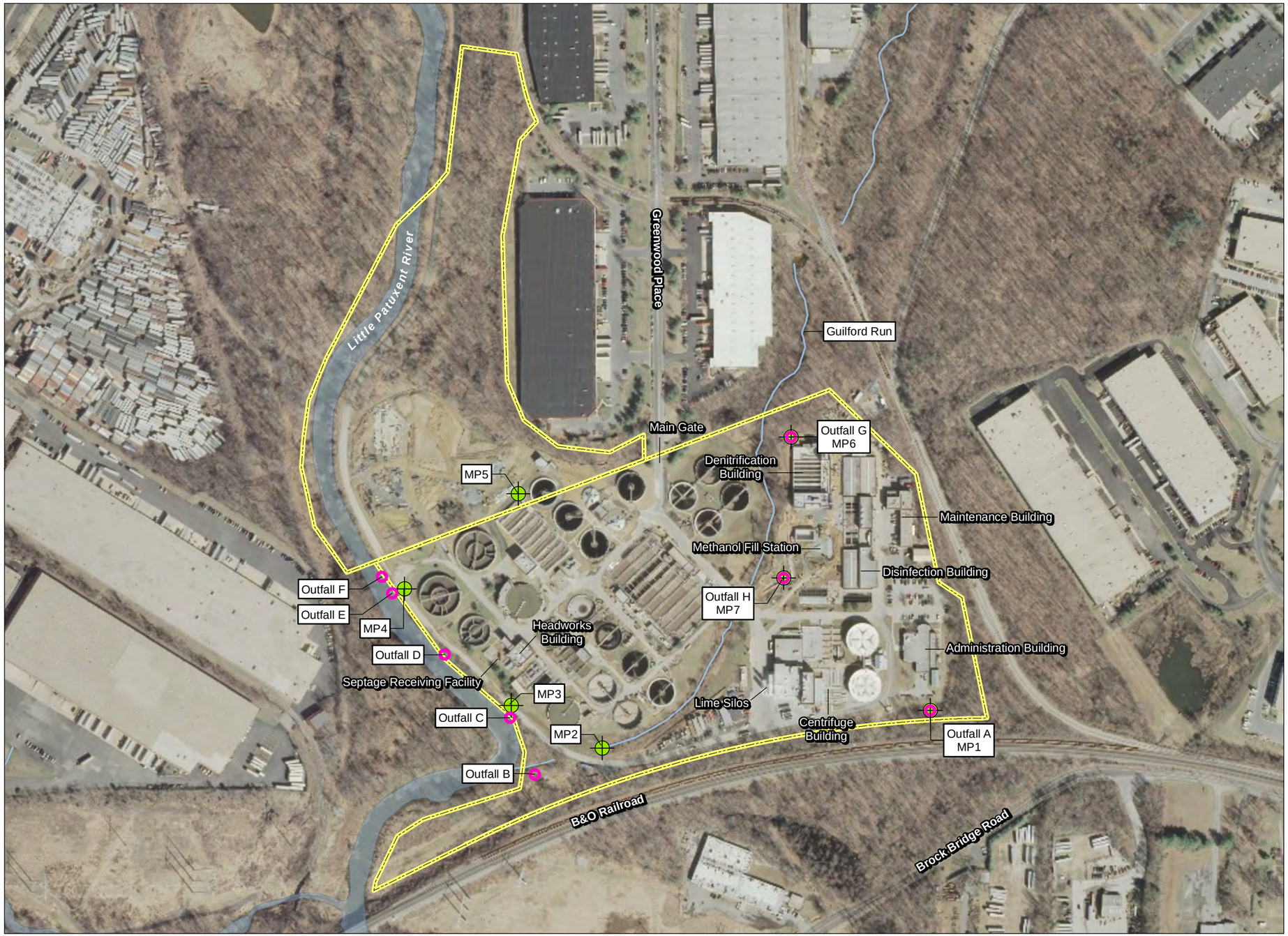
EA Engineering, Science, and Technology, Inc.

LITTLE PATUXENT WATER RECLAMATION PLANT
STORMWATER POLLUTION PREVENTION PLAN
SAVAGE, MD

TITLE SHEET

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.
JK	JK	JUNE 2014	1466540
CHECKED BY	PROJECT MGR.	DRAWING NO.	FIGURE
SL	SMM	TS-1	1



Legend

- Outfall
- Monitoring Point
- Property Boundary

N

0 200 400 800

Graphic Scale in Feet

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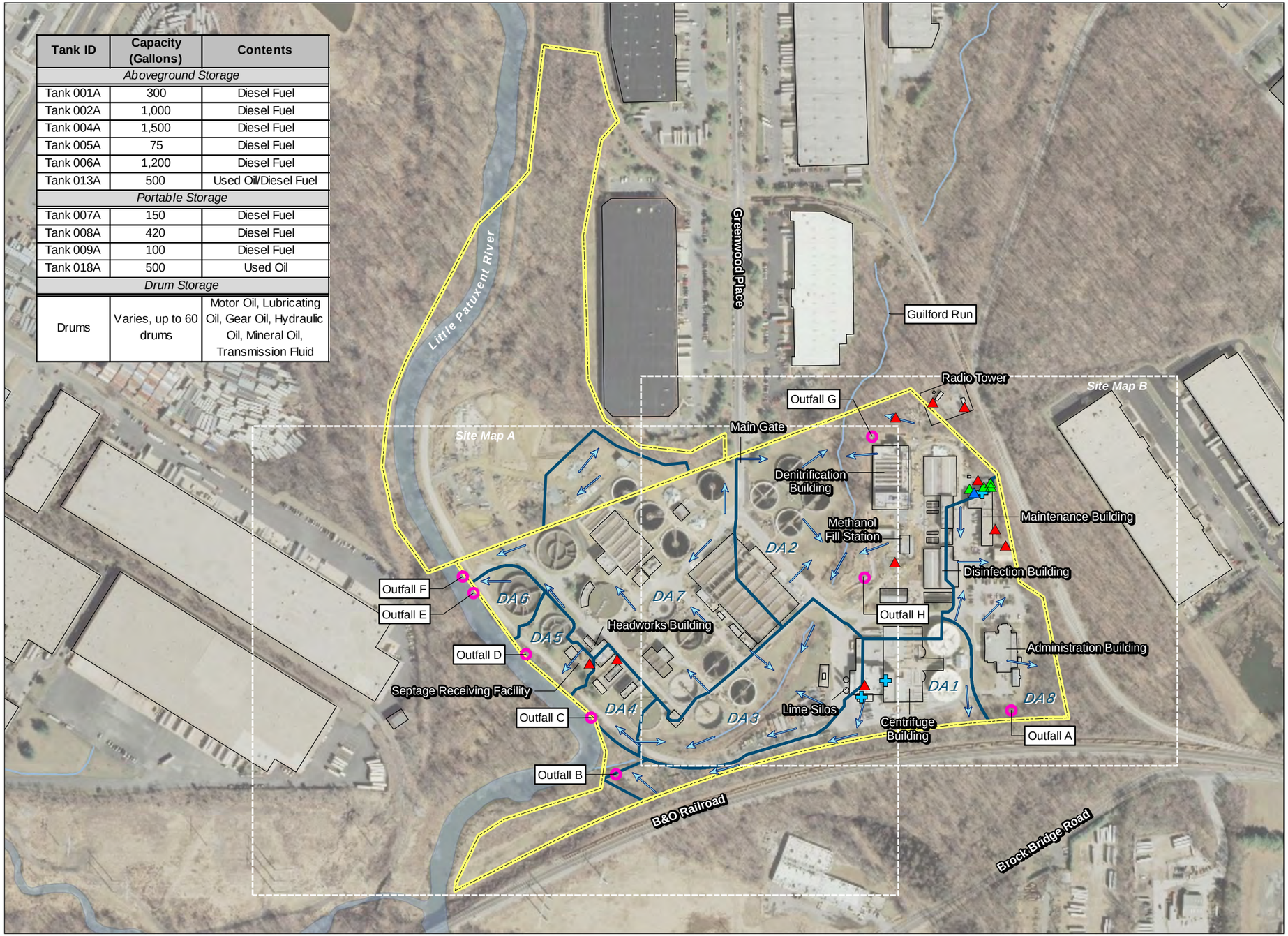
EA Engineering, Science, and Technology, Inc.

LITTLE PATUXENT WATER RECLAMATION PLANT
STORMWATER POLLUTION PREVENTION PLAN
SAVAGE, MD

AERIAL MAP

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.
JK	JK	JUNE 2014	1466540
CHECKED BY	PROJECT MGR.	DRAWING NO.	FIGURE
SL	SMM	A-1	2

Tank ID	Capacity (Gallons)	Contents
Aboveground Storage		
Tank 001A	300	Diesel Fuel
Tank 002A	1,000	Diesel Fuel
Tank 004A	1,500	Diesel Fuel
Tank 005A	75	Diesel Fuel
Tank 006A	1,200	Diesel Fuel
Tank 013A	500	Used Oil/Diesel Fuel
Portable Storage		
Tank 007A	150	Diesel Fuel
Tank 008A	420	Diesel Fuel
Tank 009A	100	Diesel Fuel
Tank 018A	500	Used Oil
Drum Storage		
Drums	Varies, up to 60 drums	Motor Oil, Lubricating Oil, Gear Oil, Hydraulic Oil, Mineral Oil, Transmission Fluid



Legend

- AST
- Portable Storage
- Drums
- Outfall
- Spill Kit
- Surface Water Flow Direction
- Drainage Area
- Property Boundary

N

0 200 400 800

Graphic Scale in Feet

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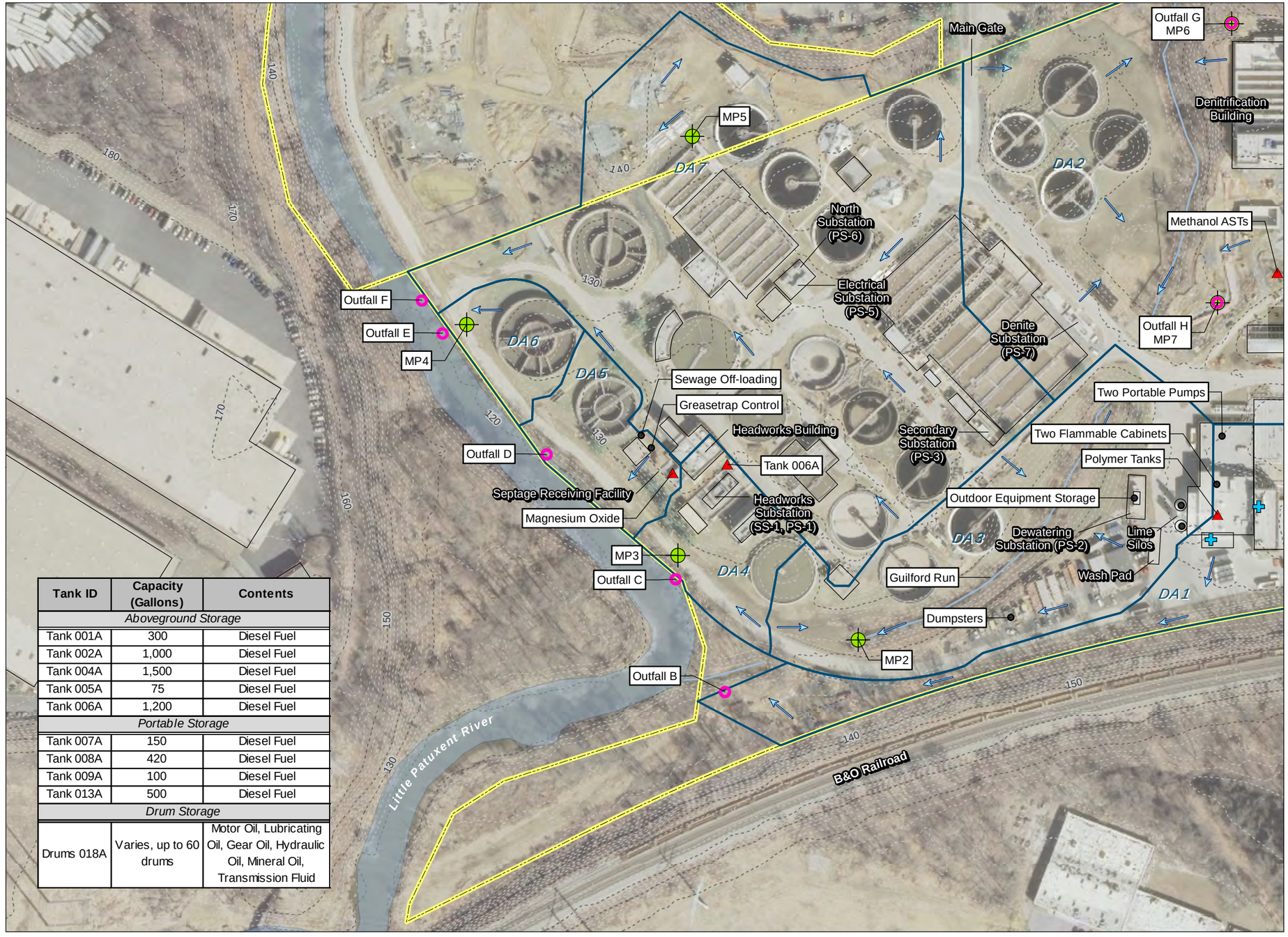
EA Engineering, Science, and Technology, Inc.

LITTLE PATUXENT WATER RECLAMATION PLANT
STORMWATER POLLUTION PREVENTION PLAN
SAVAGE, MD

SITE MAP

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.
JK	JK	JUNE 2014	1466540
CHECKED BY	PROJECT MGR.	DRAWING NO.	FIGURE
SL	SMM	S-1	3



Tank ID	Capacity (Gallons)	Contents
Aboveground Storage		
Tank 001A	300	Diesel Fuel
Tank 002A	1,000	Diesel Fuel
Tank 004A	1,500	Diesel Fuel
Tank 005A	75	Diesel Fuel
Tank 006A	1,200	Diesel Fuel
Portable Storage		
Tank 007A	150	Diesel Fuel
Tank 008A	420	Diesel Fuel
Tank 009A	100	Diesel Fuel
Tank 013A	500	Diesel Fuel
Drum Storage		
Drums 018A	Varies, up to 60 drums	Motor Oil, Lubricating Oil, Gear Oil, Hydraulic Oil, Mineral Oil, Transmission Fluid

Legend

- AST
- Portable Storage
- Drums
- Outfall
- Monitoring Point
- Spill Kit
- Surface Water Flow Direction
- 2' Minor Contour
- 10' Major Contour
- Drainage Area
- Property Boundary

N

0 100 200 400

Graphic Scale in Feet

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EA Engineering, Science, and Technology, Inc.

LITTLE PATUXENT WATER RECLAMATION PLANT
STORMWATER POLLUTION PREVENTION PLAN
SAVAGE, MD

SITE MAP A

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.
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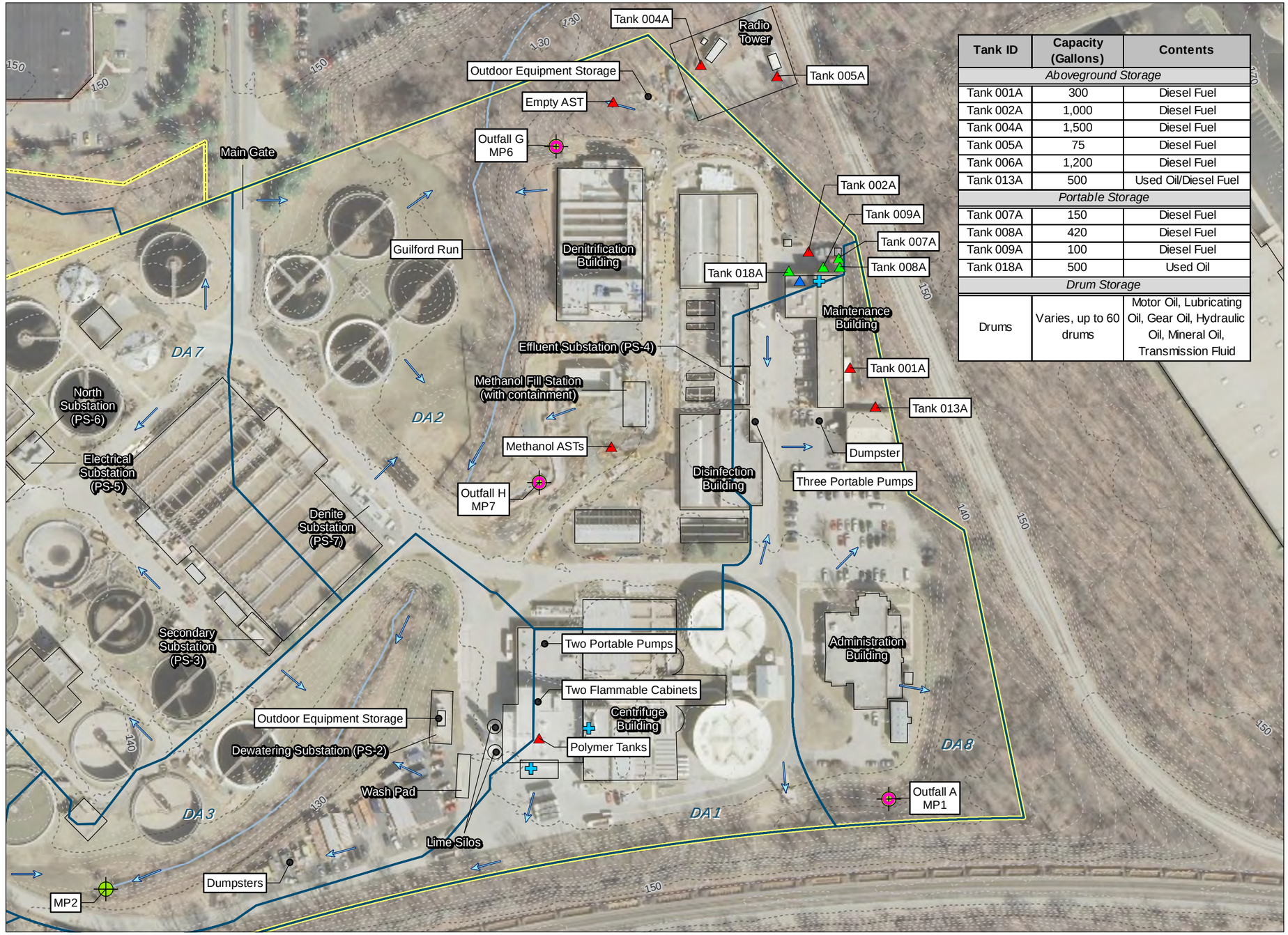
CHECKED BY	PROJECT MGR.	DRAWING NO.	FIGURE
SL	SMM	S-1a	3a



Tank ID	Capacity (Gallons)	Contents
Aboveground Storage		
Tank 001A	300	Diesel Fuel
Tank 002A	1,000	Diesel Fuel
Tank 004A	1,500	Diesel Fuel
Tank 005A	75	Diesel Fuel
Tank 006A	1,200	Diesel Fuel
Tank 013A	500	Used Oil/Diesel Fuel
Portable Storage		
Tank 007A	150	Diesel Fuel
Tank 008A	420	Diesel Fuel
Tank 009A	100	Diesel Fuel
Tank 018A	500	Used Oil
Drum Storage		
Drums	Varies, up to 60 drums	Motor Oil, Lubricating Oil, Gear Oil, Hydraulic Oil, Mineral Oil, Transmission Fluid

Legend

- AST
- Portable Storage
- Drums
- Outfall
- Monitoring Point
- Spill Kit
- Surface Water Flow Direction
- 2' Minor Contour
- 10' Major Contour
- Drainage Area
- Property Boundary

N

0 75 150 300

Graphic Scale in Feet

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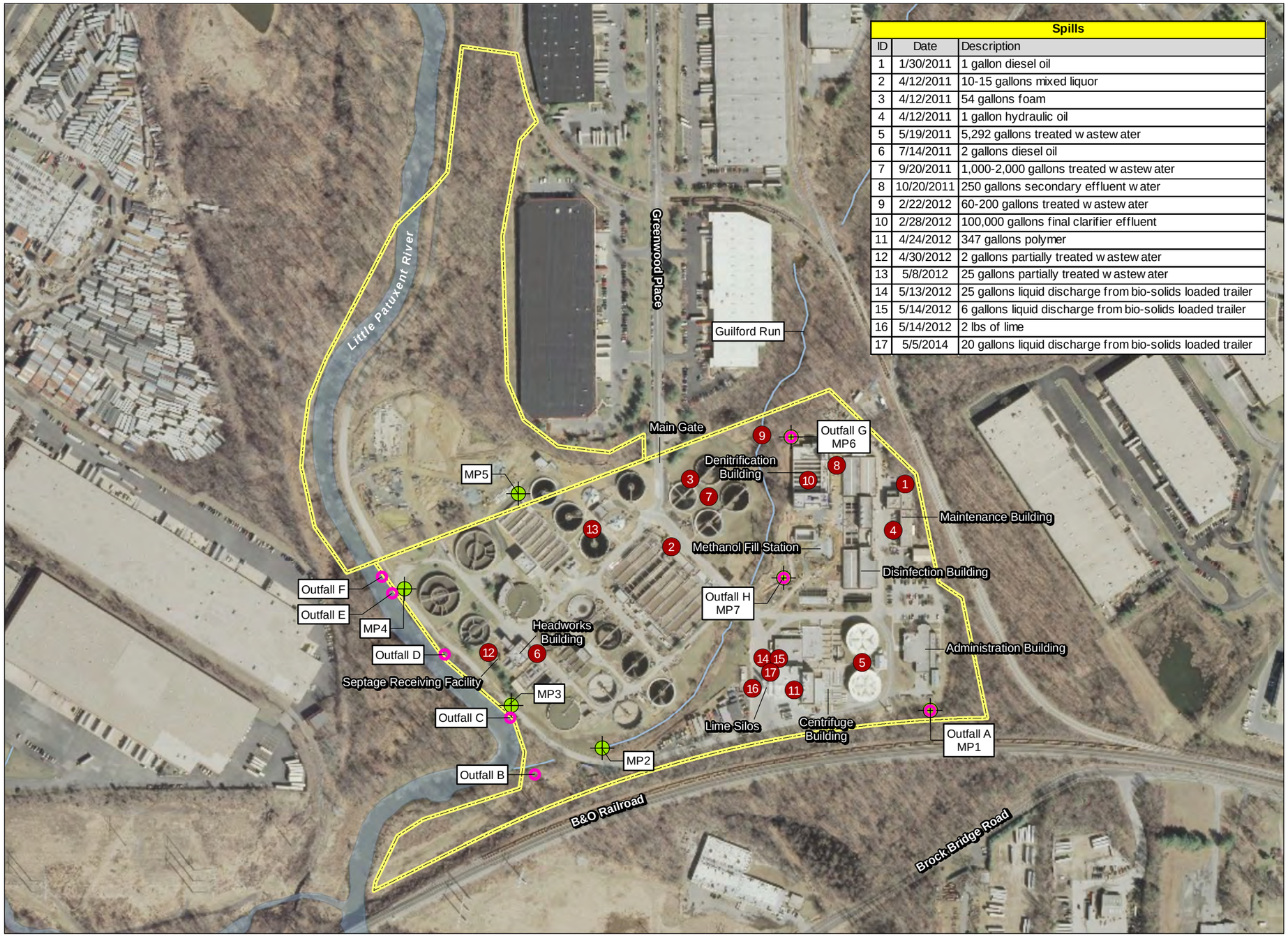
EA Engineering, Science, and Technology, Inc.

LITTLE PATUXENT WATER RECLAMATION PLANT
STORMWATER POLLUTION PREVENTION PLAN
SAVAGE, MD

SITE MAP B

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.
JK	JK	JUNE 2014	1466540
CHECKED BY	PROJECT MGR.	DRAWING NO.	FIGURE
SL	SMM	S-1b	3b



Spills		
ID	Date	Description
1	1/30/2011	1 gallon diesel oil
2	4/12/2011	10-15 gallons mixed liquor
3	4/12/2011	54 gallons foam
4	4/12/2011	1 gallon hydraulic oil
5	5/19/2011	5,292 gallons treated w astew ater
6	7/14/2011	2 gallons diesel oil
7	9/20/2011	1,000-2,000 gallons treated w astew ater
8	10/20/2011	250 gallons secondary effluent w ater
9	2/22/2012	60-200 gallons treated w astew ater
10	2/28/2012	100,000 gallons final clarifier effluent
11	4/24/2012	347 gallons polymer
12	4/30/2012	2 gallons partially treated w astew ater
13	5/8/2012	25 gallons partially treated w astew ater
14	5/13/2012	25 gallons liquid discharge from bio-solids loaded trailer
15	5/14/2012	6 gallons liquid discharge from bio-solids loaded trailer
16	5/14/2012	2 lbs of lime
17	5/5/2014	20 gallons liquid discharge from bio-solids loaded trailer

Legend

- Spill
- Outfall
- Monitoring Point
- Property Boundary

N

0 200 400 800

Graphic Scale in Feet

J:\EA\projects\MD\HowardCounty\2014\SWPPP\MXD\LPWRP_Spills.mxd

EA Engineering, Science, and Technology, Inc.

LITTLE PATUXENT WATER RECLAMATION PLANT
STORMWATER POLLUTION PREVENTION PLAN
SAVAGE, MD

SPILL INDEX MAP

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.
JK	JK	JUNE 2014	1466540
CHECKED BY	PROJECT MGR.	DRAWING NO.	FIGURE
SL	SMM	---	---

APPENDIX E

NON-STORMWATER DISCHARGE EVALUATION

Non-Stormwater Discharge Evaluation
Stormwater Pollution Prevention Plan

The Maryland Department of the Environment General Discharge Permit 12-SW, Part III.C.3.d requires that a Non-Stormwater Discharge Evaluation be performed at the facility and documented, and that all non-stormwater discharges observed be eliminated.

Facility Name:	Little Patuxent Water Reclamation Plant (LPWRP)
Location:	8900 Greenwood Place, Savage, MD 20763
Date:	April 8, 2014
Individual(s) performing the evaluation *(include title and company)*:	Matt Slagel, EA Engineering, Science, and Technology Samantha Lemaster, EA Engineering, Science, and Technology
Description of Evaluation Criteria:	Assessors reviewed site plans and confirmed drainage areas. Assessors walked throughout LPWRP as well as LPWRP's perimeter and looked for evidence of non-stormwater discharges (or wastewater) generated by LPWRP. Assessor looked for physical evidence of activities that would potentially generate wastewater discharges. Employee interviews were conducted to confirm observations and to determine what types of activities occur or do not occur on site (i.e., vehicle and/or equipment washing, loading/unloading areas, etc.).
List of the outfalls or onsite drainage points that were directly observed during the evaluation:	Outfalls A through G were observed.
List of the non-stormwater discharges observed by the corresponding outfall or drainage point:	There were no non-stormwater discharges observed at any of the outfalls.
Action(s) taken to eliminate authorized discharges:	No actions are needed to eliminate the non-stormwater discharges.

APPENDIX F

HOWARD COUNTY SPILL RESPONSE AND NOTIFICATION SOP

Howard County
Standard Operating Procedure

Subject: Spill Response and Notification Procedure	**SOP No.:** BES-ENV-001
	Revision No.: Initial
Issued: 5/30/14 **Effective:** 5/30/14 **Approved:**	

Purpose:

To ensure that Howard County personnel understand how to properly respond to a release of oil and/or hazardous material and that the necessary federal and state notifications occur in order to maintain regulatory compliance.

Applicability:

This procedure applies to all Howard County staff in the event of a spill or leak.

Responsibility:

The Howard County Department of Public Works Bureau of Environmental Services (BES) shall be responsible for providing guidance to facility personnel regarding spill response and will coordinate all federal, state and local notifications and reporting in accordance with this SOP.

All Howard County staff who discover or observe a spill or leak must immediately report the spill to the designated responder and address it in accordance with their level of training.

Procedure:

MINOR DISCHARGE

1. Upon discovery of a spill/leak, personnel must report the spill immediately to the Superintendent or their designee.
    A. If the spill/leak occurs outside normal business hours call 410-313-2929.
2. At the direction of the Superintendent and ***only if safe to do so***, identify the source of the spill/leak and attempt to prevent the spill/leak from reaching soil and/or Maryland waters of the State.
    A. Clean up the spilled material with appropriate spill response equipment.
        i. Materials may include but are not limited to stay dry, absorbent pads or mats, or booms.
        ii. Once allowed to absorb, materials must be collected within the used absorbent drum.
    B. Dispose of materials in a properly labeled container.
        i. Container may be located in an approved Satellite Accumulation Area within the Facility.
        ii. Disposal container may be taken directly to the Main Accumulation Area.
            a. Label the container with the accumulation start date.
3. The Superintendent or their designee will complete and submit the DISCHARGE NOTIFICATION FORM (Appendix A) to the BES and it will be retained in both BES and facility files.
4. No further reporting is necessary.

MAJOR DISCHARGE

1. Immediately evacuate the area and notify the Superintendent or their designee.
    A. Call 911 for medical assistance or to alert the Howard County Fire Department or Police Department.

B. Contact the appropriate emergency responders from the list provided in Appendix A.
C. Notify Maryland Department of Environment (MDE) Emergency Response Division within two hours of the release.
    i. The MDE Emergency Response Division can be reached at 1-866-633-4686 (24 hour reporting) or 410-537-3975.
    ii. The notification will include:
        a. The exact address, location and phone number of the facility
        b. The date and time of the release
        c. The type of material released
        d. Estimates of the total quantity released
        e. The source and exact location of the release
        f. A description of all affected media
        g. The cause of the release
        h. Any damages or injuries caused by the release
        i. Actions being taken to stop, remove, and mitigate the area impacted by the release
        j. Whether an evacuation may be needed
        k. The names of individuals and/or organizations who have been contacted to assist in the cleanup
        l. Whether or not assistance is required
        m. The name, address, and telephone number of the person making the report
        n. Other information as requested.
    ii. The Superintendent will complete an MDE Spill Incident Report Form (included as Appendix B) and submit to MDE within 10 working days of the completion of removal/clean-up work. BES will be copied on the transmission.

2. If oil is discharged to Waters of the State, notify the National Response Center National Response Center (NRC) immediately.
    i. A harmful quantity of oil is one which causes a visible sheen or leaves sludge or emulsion beneath the surface.
    ii. The NRC can be reached at 1-800-438-2474.
    iii. Report will include:
        a. Name, organization and telephone number
        b. Name and address of the responsible party
        c. Date, time, location of the incident
        d. Source, cause, type and amount of discharge
        e. Danger or threat posed/number of injuries
        f. Weather at the time of the incident
        g. Other information requested.
    iv. The Superintendent will complete the DISCHARGE NOTIFICATION FORM (Appendix A) and will submit to BES.

3. If the facility is subject to the Spill Prevention, Control, and Countermeasures Rule (SPCC), in addition to the notification requirements under 1 & 2 above, the facility must also notify US EPA and the NRC if the following occur.
    i. Discharges of more than 1,000 gallons of oil in a single discharge or
    ii. More than 42 gallons of oil in each of two discharge events in a 12-month period.
    iii. The EPA Region 3 Administrator can be reached at 1-800-438-2474. The NRC can be reached at 1-800-424-8802.
    iv. The report should be made within 60 days of the discharge and include:
        a. Name and location of the facility
        b. Owner/Operator name
        c. Maximum storage/handling capacity of the facility and normal daily throughput
        d. Corrective actions and countermeasures taken
        e. Description of the facility included maps
        f. Cause of the discharge and failure analysis

g. Additional measures taken or planned to minimize reoccurrence
h. Any other information required.

v. Further guidance relative to the reporting under the SPCC Rule can be found in the facility SPCC Plan if applicable.

RECORDKEEPING

1. Notifications submitted to the BES shall be retained in facility files for at least five years.
2. Any documentation submitted to an external agency (EPA, MDE, NRC, or Local Governments) shall also be retained in facility files for at least five years.
3. Record logs for spills and leaks should be updated in the facility Stormwater Pollution Prevention Plan and/or Spill Prevention Control and Countermeasures Plans.

TRAINING

1. The BES shall conduct annual Spill Response and Notification training for all applicable Howard County staff who engage in activities that involve hazardous materials. Training shall include the following:
   A. Spill response,
   B. Documentation procedures,
   C. Personal protective equipment, and
   D. General education on various types of hazardous materials.
2. The BES shall maintain documentation of spill response training for all employees for at least five years.

PERSONNEL PROTECTIVE EQUIPMENT (PPE)

1. Certain types of PPE, such as gloves, protective clothing, and eyewear may be needed during spill response activities. Consult your supervisor for proper equipment.

Definitions:

Discharge – Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, dumping, addition of, or introduction of any pollutant into waters of the State, or the placing of any pollutant in a location where it is likely to pollute.

Hazardous Substance – As defined by EPA, any material that poses a threat to human health and/or the environment. Hazardous substances are typically toxic, corrosive, ignitable, explosive, or chemically reactive.

Major Discharge – Discharge that cannot be safely controlled or cleaned up by facility personnel and is reportable. Major discharges are large enough to spread beyond the immediate discharge area, reach nearby water, soil, or sanitary sewers, require special clean up equipment or training, pose a hazard to human health or safety or present a risk of fire or explosion. Reportable quantities for chemicals other than petroleum may be found in 40 CFR 302.4. Discharges which reach the sanitary sewer are considered major.

Minor Discharge – Discharge that poses no significant harm or threat to human health and safety or to the environment. Minor discharges are small enough to be easily stopped and contained, do not reach nearby waters or soils, are localized at the source, present little risk to human health or safety and present little risk of fire or explosion.

Navigable Waters – The waters of the U.S. including all waters currently used, were used in the past or may be used in interstate or foreign commerce; all waters subject to the ebb and flow of the tide; interstate waters and wetlands; intrastate lakes, rivers, streams, intermittent streams, sandflats, mudflats, tributaries of such waters and wetlands.

Oil – Oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

Pollutant – Any waste or wastewater that is discharged from a sewage system, from an industrial source, or any other liquid, gaseous, solid, or other substances which will or may cause pollution to waters of the State. Examples of pollutants include salt, salt brine, magnesium chloride, sewage/septic etc.

Reportable Discharge – Any discharge which meets any of the following: (a) Discharge of oil which reaches Waters of the State must be reported to MDE; (b) Discharges of more than 1,000 gallons of oil in a single discharge or more than 42 gallons of oil in each of two discharge events in a 12-month period must be reported to the USEPA and NRC;

Spill – For the purposes of this procedure, a release of any pollutant to the environment.

Waters of the State – Both surface and underground waters within the boundaries of this State subject to its jurisdiction, including that part of the Atlantic Ocean within the boundaries of this State, the Chesapeake Bay, and its tributaries, and all ponds, lakes, rivers, streams, tidal and non-tidal wetlands, public ditches, tax ditches and sanitary sewage. Also includes the flood plain of free-flowing waters determined by the Department of Natural Resources on the basis of the 100-year flood frequency.

Contacts:
Cynthia Brouwers Bureau of Environmental Services: 410-313-6447

Appendix A
Discharge Notification Form

DISCHARGE NOTIFICATION REPORT FORM

Part A: Discharge Information

General information when reporting a spill to outside authorities:

Owner/Operator:
Howard County
Department of Public Works
3430 Court House Dr.
Ellicott City, MD
(410) 313-4401

Primary Contact:
Facility Superintendent

Type of Material:	Discharge Date and Time:
Quantity Released:	Discovery Date and Time:
Quantity Released to a Water Body:	Discharge Duration:
Location/Source:	
Actions taken to stop, remove, and mitigate impacts of the discharge:	

Affected media:

- Air
- Water
- Soil
- Storm water sewer/POTW
- Dike/berm/oil-water separator
- Other: _____

Notification person:
Telephone contact:
Business:
24-hr:

Nature of discharges, environmental/health effects, and damages:

Injuries, fatalities or evacuation required?

Part B: Notification Checklist

Contact Name, Title, and Phone Number	*Date and Time*	*Name of Person Receiving Call*
All Discharges:		
Cynthia Brouwers, Environmental Compliance Engineer, BES, (410) 313-6447		
Major Discharge:		
Howard County Police Department, 911 or (410) 313-2200		
Howard County Fire Department, 911 or (410) 313-6000		
Emergency Response Contractors Apex Companies, LLC (800) 733-2739 NCM Demolition and Remediation, LP (800) 666-0741		
Little Patuxent Water Reclamation Plant, (410) 880-5810 (if discharge reaches sanitary sewer)		
National Response Center, (800) 424-8802 (if discharge reaches navigable waters)		
Maryland Department of the Environment, (866) 633-4686		

Appendix B
MDE Spill Reporting Form

MARYLAND DEPARTMENT of the ENVIRONMENT
1800 WASHINGTON BOULEVARD
BALTIMORE , MARYLAND. 21230
(410) 537-3000
1-800-633-6101 (within Maryland)
http://www.mde.state.md.us

State of Maryland
Department of the Environment
Emergency Response Division
1800 Washington Blvd. Suite #105
Baltimore , Maryland. 21230-1721

24 HOUR SPILL REPORTING
(Toll Free) 1-866-633-4686
EMERGENCY RESPONSE OFFICE
(410) 537-3975
RESPONSE OFFICE FACSIMILE
(410) 537-3932

PURSUANT TO THE PROVISIONS OF STATE LAW AND REGULATION; (COMAR 26.10.01.03) "A PERSON DISCHARGING OR PERMITTING THE DISCHARGE OF OIL, OR WHO EITHER ACTIVELY OR PASSIVELY PARTICIPATES IN THE DISCHARGE OR SPILLING OF OIL, EITHER FROM A LAND BASED INSTALLATION, INCLUDING VEHICLES IN TRANSIT, OR FROM ANY VESSEL SHIP OR BOAT OF ANY KIND, SHALL REPORT THE INCIDENT IMMEDIATELY TO THE ADMINISTRATION." " THE REPORT OF AN OIL SPILL OR DISCHARGE SHALL BE MADE TO THE ADMINISTRATION IMMEDIATELY, BUT NOT LATER THAN TWO HOURS AFTER DETECTION OF THE SPILL." *** *FIRE DEPARTMENT PERSONNEL , SEE REVERSE* ***

ADC Map Coord _____

Date of spill: Mo. __ __ / Day __ __ / Yr. 20 __ __ Time of spill: __ __ __ __ Hours (24 hour clock)

Fire Department Report No.: _____ Police Department Report No.: _____

Location of spill - Street address:
_____
_____
City / Town _____
MD County _____
Zip _____

Product Name:
_____
(Indicate Gasoline, Diesel, Heating Oil, Chemical Name or UN ID etc.)
Container Type:
_____
(Indicate AST, UST, Transformer, Saddle Tank, Drum etc.)

Capacity of Vessel, Vehicle or Tank:
_____ Gallons
Amount *IN* Vessel, Vehicle or Tank:
_____ Gallons
Estimated ***Amount Spilled:***
_____ Gallons

Transportation Incident:
_____
(Indicate Type of Auto, Truck, Train, Aircraft or Watercraft etc.)
Fixed Facility Incident:
_____
(Indicate Type of Industrial , Commercial , Residential etc.)

☐ Contained on Land
☐ Entered Storm Drain or Ditch
☐ Entered Sanitary Sewer
☐ Is Below Ground
☐ Entered surface waters: Waterway Name
_____

Vehicle Tag Number and State:
_____ _____
DOT or ICC MC Number:
_____
Hull Numbers and Name:
_____ _____

Person(s) Responsible for Spill: (Driver if Vehicle)
Name:_____
Address:_____
_____
City/State: _____ Zip: _____
Phone: _____
Drivers Lic.No._____ State:_____

Be Sure to Complete Both Sections
Don't Forget to Sign Below

Company Responsible for Spill: (N/A if private citizen.)
Name:_____
Address:_____
_____
City/State: _____ Zip: _____
Phone: _____
Fed. Employer ID No. _____

Cause of Spill:
☐ Motor Vehicle Accident
☐ Personnel Error/Vandalism
☐ Tank/Container/Pipe Leak
☐ Mechanical Failure
☐ Transfer Accident
☐ _____

Identify All Groups that *Participated* in Spill Mitigation : ☐ Responsible Party
☐ MDE ERD # _____ # _____
☐ Federal : _____
☐ State : _____
☐ Local : _____
☐ Contractor: _____

Materials used *by You* to contain/clean-up spill:
Sorbent Dust: _____ Bags
Sorbent Pads: _____ each or bales
Sorbent Booms: _____ each or bales
Sorbent Sweeps: _____ each or bales
Overpack Drums : _____ ea. Steel or Poly
Other:_____

Responsible Party : Describe circumstances contributing to the spill. (Additional space on back) [Optional for FD or Gov't Personnel]

Responsible Party : Describe Containment , Removal and Clean-up operations , including disposal. (Additional space on back) [Optional for FD or Gov't Personnel]

Responsible Party : Procedures, Methods and Precautions instituted to prevent recurrance of the spill. (Additional space on back) [Optional for FD or Gov't Personnel]

THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROVIDED IS TRUE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED.

Print Name: _____ **Company or Fire Department:** _____
Address : _____ **City / State / Zip** _____
Telephone _____ **Signature** _____

MARYLAND DEPARTMENT of the ENVIRONMENT
1800 WASHINGTON BOULEVARD
BALTIMORE , MARYLAND. 21230
(410) 537-3000
1-800-633-6101 (within Maryland)
http://www.mde.state.md.us

State of Maryland
Department of the Environment
Emergency Response Division
1800 Washington Blvd. Suite #105
Baltimore , Maryland. 21230-1721

24 HOUR SPILL REPORTING
(Toll Free)1-866-633-4686
EMERGENCY RESPONSE OFFICE
(410) 537-3975
RESPONSE OFFICE FACSIMILE
(410) 537-3932

PURSUANT TO THE PROVISIONS OF STATE LAW AND REGULATION; (Environmental Article 4-401 (l) ; the "Person Responsible for the discharge includes , The owner of the discharged oil , The owner , operator and / or the person in charge of the oil storage facility, vessel , barge , or vehicle involved at the time of or immediately before the discharge ; and Any person who through act or ommission , causes the discharge."

***** Fire Department *** and Local or State Government Agencies : Unless you are the responsible party as defined above , Please indicate " Unknown " in any box reuesting information that is unknown or unavailable to you at the time of report.***

This Space for continuation and additional information.

THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROVIDED IS TRUE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED.

Print Name: _____ **Company or Fire Department:** _____
Address : _____ **City / State / Zip** _____
Telephone _____ **Signature** _____

APPENDIX G

RECORD OF SPILLS AND LEAKS

SPILL HISTORY LOG

Briefly summarize the spill incident below and attach associated documentation of the incident to maintain with the SPCC Plan.

Date (MM/DD/YYYY)	Location (as indicated on site map)	Spill/Leak Description				Response Procedures and Approximate Quantity Recovered	Preventative Measures Taken	Name of Recorder
		Type of Material	Quantity	Source (if known)	Reason			

SPILL HISTORY LOG

Briefly summarize the spill incident below and attach associated documentation of the incident to maintain with the SPCC Plan.

Date (MM/DD/YYYY)	Location (as indicated on site map)	Spill/Leak Description				Response Procedures and Approximate Quantity Recovered	Preventative Measures Taken
		Type of Material	Quantity	Source (if known)	Reason		
4-12-11	FROM MAINTENANCE BLDG TO THE OFFICE TRAILERS	HYDRAULIC OIL	1 gal.	STREET SWEEPER VEHICLE OF CLARK/USC	DRIVER DID NOT INSPECT VEHICLE PRIOR TO SWEEPING THE ROAD	APPLIED ABSORBENTS ON AFFECTED AREAS	DRIVERS TO INSPECT VEHICLES BEFORE USE
7-14-11	TANK 006A	DIESEL OIL	2 gals	Fueling tanker	Handle did not release when tank got full	Applied Absorbents on affected areas	Operator to watch tank fuel indicator when filling
1-30-11	Tank 008A	DIESEL OIL	1 gal	Portable Generator Fuel Tank	Diesel overflow from tank	Applied absorbents in affected areas	Don't tilt tank towards the cap. Keep it level

Howard County
MARYLAND

Department of Public Works
BUREAU OF UTILITIES

Stephen C. Gerwin, Bureau Chief

April 14, 2011

Water Management Administration
Compliance Program
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Carol Hasselbercer

Re: Spill Incidents at the Little Patuxent Water Reclamation Plant

As a follow up to my notification over the telephone with your office on Tuesday April 12, 2011, I am sending this report regarding the contained two small quantity spill incidents at the Little Patuxent Water Reclamation Plant.

The first spill incident was discovered at about 1:50 am on April 12, 2011and about 10-15 gallons of mixed liquor was found to be on the sidewalk and on the road on the East side gallery of the plant. The operator traced the source from a pinhole on a 2-in flexible hose and immediately shut off the pump which was transferring mixed liquor from process reactor #1 to #3. Lime was spread over the affected area and then reclaimed as much material that can be recovered. Reclaimed material was taken to the plant headworks. None of the spilled mixed liquor went into a storm drain or to the Guilford Run tributary. The leaking hose was replaced as a corrective measure.

The other spill incident on this same day was discovered at about 8:30 am when a laboratory technician found foam overflowing from the East side splitter box that feeds Final Clarifier #6. Plant operators found that the foam water spray at the splitter box was clogged and at about 8:45 a hose with a spray nozzle was installed. Preliminary estimate of the foam volume that overflowed the splitter box was about 30 gallons. The foam stayed within 2 feet from the splitter box perimeter and did not go any further out on the ground. At about 10:00 am, all the spilled foam was taken over to the plant headworks. Actual volume was measured to be 54 gallons. Lime was sprayed on the area where foam was reclaimed. As a corrective measure, operators will regularly check the foam spray for any signs of abnormality.

I have attached pictures for exact location where the spills occurred at the Little Patuxent Water Reclamation Plant. Should you have any questions, please feel free to call me at (410) 880-5814.

Sincerely,

Rene Javier
Pretreatment Coordinator
Little Patuxent Water Reclamation Plant

Howard County
MARYLAND

Department of Public Works
BUREAU OF UTILITIES

Stephen C. Gerwin, Bureau Chief

May 20, 2011

CERTIFIED MAIL

Water Management Administration
Compliance Program
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Carol Hasselbercer

Re: Spill Incident at the Little Patuxent Water Reclamation Plant (LPWRP)

As a follow up to my notification over the telephone with your office on Thursday May 19, 2011, I am sending this report regarding the contained spill incident at the Little Patuxent Water Reclamation Plant.

Hydrostatic testing was conducted in preparation for a test run on Dreyer's treatment equipment. At about 10:00 am, one of the operators found water coming out of the ground, which is located along the walkway in between the two anaerobic digesters. The main valve was shut off and the water coming out of the ground stopped at about 10:10 am. Initial estimate of the volume that blew out of the underground pipe was about 200 gallons. The entire spill was contained in the grass covered areas and there was no evidence that a portion of it went into the storm drain or the Little Patuxent River.

Prior to the hydrostatic tests, the anaerobic digesters were filled with the LPWRP's treated wastewater. This treated wastewater, which is chlorinated and then de-chlorinated has the same quality as that which is discharged to the Little Patuxent River through the LPWRP's NPDES permit. After a thorough assessment, it was found that the water level at the 104 feet diameter anaerobic digester #1 dropped about an inch and this was calculated to be about 5,292 gallons.

I have attached a picture for exact location where the spill occurred at the Little Patuxent Water Reclamation Plant. Should you have any questions, please feel free to call me at (410) 880-5814.

Sincerely,

Rene Javier
Pretreatment Coordinator
Little Patuxent Water Reclamation Plant

Howard County
MARYLAND

Department of Public Works
BUREAU OF UTILITIES

Stephen C. Gerwin, Bureau Chief

September 26, 2011

CERTIFIED MAIL: 7004 1160 0001 9632 0855

Water Management Administration
Compliance Program
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Cathy Mohan

Re: Spill Incident at Little Patuxent Water Reclamation Plant (LPWRP)
Permit Number: 06-DP-1421
NPDES Permit Number: MD0055174

As a follow up to my notification over the telephone with your office on Tuesday September 20, 2011, I am sending this report regarding the spill incident at the Little Patuxent Water Reclamation Plant.

At 2125, the Operations Supervisor, found the spray water line (process water) to the East Final Clarifiers splitter box discharging onto the ground. This line was broken during a repair internally by Howard County Utilities personnel. The break in the line was not noticed until late in the evening due to ENR upgrade repair to the Process water line which was shut-off during the day then turned back on after 4pm.

The Process Water is classified as LPWRP's treated wastewater. This treated wastewater, which is chlorinated and then de-chlorinated, has the same quality as that which is discharged to the Little Patuxent River. It was estimated to be a spill of approximately 1000 gallons but no more than 2000 gallons.

Should you have any questions, please feel free to call me at (410) 880-5820.

Sincerely,

Denise Junis
Engineering Support Supervisor
Little Patuxent Water Reclamation Plant

Howard County
MARYLAND

Department of Public Works
BUREAU OF UTILITIES

Stephen C. Gerwin, Bureau Chief

October 20, 2011

CERTIFIED MAIL:

Water Management Administration
Compliance Program
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Carol Hasselberger

Re: Spill Incident at Little Patuxent Water Reclamation Plant (LPWRP)
Permit Number: 06-DP-1421
NPDES Permit Number: MD0055174

As a follow up to my notification over the telephone with your office on Friday October 14, 2011, I am sending this report regarding the spill incident at the Little Patuxent Water Reclamation Plant.

On October 13, 2011 at 1400, the Operations Supervisor informed me that the 6" hydraulic pump was disconnected by an unknown person associated with the construction personnel doing the ENR upgrade. This line contained secondary effluent water and was discharged onto the ground. The secondary effluent water did not reach any storm drains. By protocol, these storm drains have been silt and gravel covered to impede any drainage resulted by a spill. It was estimated to be a spill of approximately 250 gallons.

Should you have any questions, please feel free to call me at (410) 880-5820.

Sincerely,

Denise Junis
Engineering Support Supervisor
Little Patuxent Water Reclamation Plant

Howard County
MARYLAND

Department of Public Works
BUREAU OF UTILITIES

Stephen C. Gerwin, Bureau Chief

November 22, 2011

CERTIFIED MAIL:

Water Management Administration
Compliance Program
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Cathy Mohan

Re: Spill Incident at Little Patuxent Water Reclamation Plant (LPWRP)
Permit Number: 06-DP-1421
NPDES Permit Number: MD0055174

As a follow up to the notification over the telephone with your office on Friday November 18, 2011 at 10:10a.m., I am sending this report regarding the spill incident at the Little Patuxent Water Reclamation Plant.

The auto sampler responsible for collection of the Plant's Final Effluent malfunctioned between 5 p.m. on Thursday November 17th to approximately 8 a.m. on Friday November 18th. This sample is utilized for reporting purposes for the Discharge Monitor Report. The auto sampling error resulted in an over-volume collected in the sample container and spillage within the auto sampler itself. The volume lost was estimated to be between 500-700mls.

The auto sampler was monitored throughout the weekend for any possible reoccurring event. The auto sampler did not have any failure in the collection of sample. Therefore, the original failure was a one-time unexplainable event.

Should you have any questions, please feel free to call me at (410) 880-5820.

Sincerely,

Denise Junis
Engineering Support Supervisor
Little Patuxent Water Reclamation Plant

8900 Greenwood Place, Savage, MD 20763 Tel. No. (410) 880-5810 FAX (410) 880-5812

Howard County
MARYLAND

Department of Public Works
BUREAU OF UTILITIES

Stephen C. Gerwin, Bureau Chief

February 27, 2012

CERTIFIED MAIL:

Water Management Administration
Compliance Program
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Kathy Mohan

Re: Spill Incident at Little Patuxent Water Reclamation Plant (LPWRP)
Permit Number: 06-DP-1421
NPDES Permit Number: MD0055174

As a follow up to my notification over the telephone with your office on Thursday February 23, 2012, I am sending this report regarding the spill incident at the Little Patuxent Water Reclamation Plant.

On February 22, at approximately 1530, the Pretreatment Coordinator found an underground pipe to be leaking into the Guilford Run waterway located on the Treatment Plant's property. Upon investigation, it was determined to be the water reuse pipeline that supplies the Plant's process water through a dedicated line to Dryer's Ice Cream Plant. The reclaimed water pump and subsequent valves were shut off which made the leak stop completely.

The Process Water is classified as LPWRP's treated wastewater. This treated wastewater, which is chlorinated and then de-chlorinated, has the same quality as that which is discharged to the Little Patuxent River. The time reported for the flow of process water into the Guilford Run was 4:00 to 5:00 pm. It was estimated to be a spill of approximately 60 gallons but no more than 200 gallons.

Should you have any questions, please feel free to call me at (410) 880-5820.

Sincerely,

Denise Junis
Engineering Support Supervisor
Little Patuxent Water Reclamation Plant

Howard County
MARYLAND

Department of Public Works
BUREAU OF UTILITIES

Stephen C. Gerwin, Bureau Chief

March 6, 2012

CERTIFIED MAIL: 7010 1060 0001 5386 2765

Water Management Administration
Compliance Program
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Kathy Mohan

Re: Spill Incident at Little Patuxent Water Reclamation Plant (LPWRP)
Permit Number: 06-DP-1421
NPDES Permit Number: MD0055174

As a follow up to my notification over the telephone with your office on Wednesday February 29, 2012, I am sending this report regarding the spill incident at the Little Patuxent Water Reclamation Plant.

On Tuesday, February 28th, between the hours of 7:42pm to 10:22pm, the Denitrification Filter number 7 at the new Enhanced Nutrient Removal Facility overflowed approximately 100,000 of final clarifier effluent prior to disinfection. A portion of the overflow went into the Guilford Run waterway located on the Plant's property. The

The filter was inactive for a 28 day period. Upon placing the filter in active service, a coding in the software program malfunctioned which had caused the overflow. The manufacturer was contacted and the coding error was corrected.

To prevent the Denitrification filters from overflowing, the County will be establishing high flow Ecan alarms to signify a high water level on each filter, correct and modify all algorithms, install additional float switches and hard wiring to the pumps sending a signal to stop if necessary, and possibly installing a containment

curb around the top of the filters.

Should you have any questions, please feel free to call me at (410) 880-5820.

Sincerely,

Denise Junis
Engineering Support Supervisor
Little Patuxent Water Reclamation Plant

DISCHARGE NOTIFICATION REPORT FORM

Part A: Discharge Information	
General information when reporting a spill to outside authorities:	
Owner/Operator: Howard County Department of Public Works 3430 Court House Dr. Ellicott City, MD 21043 (410) 313-2700	Primary Contact: Rene Javier, Team Leader Little Patuxent Water Reclamation Plant (LPWRP) 8900 Greenwood Place Savage, MD 20763 (410) 880-5814
Type of Material: Polymer	Discharge Date and Time: April 24, 2012 10:15 am.
Quantity Released: 347 gals	Discovery Date and Time: April 24, 2012 10:15 am.
Quantity Released to ~~a Water Body~~: Headworks	Discharge Duration: few minutes
Location/Source: Polymer storage area	
Actions taken to stop, remove, and mitigate impacts of the discharge:	
Affected media: • Air • Water • Soil • Storm water sewer/POTW • Dike/berm/oil-water separator • Other: _____	Notification person: Telephone contact: Business: 24-hr: Not required
Nature of discharges, environmental/health effects, and damages: none Injuries, fatalities or evacuation required? N/A	

Part B: Notification Checklist		
Contact Name, Title, and Phone Number	*Date and Time*	*Name of Person Receiving Call*
All Discharges:		
Bill Holland, Acting Operations Superintendent, (410) 880-5819		
Mike Porter Operations Manager, (410) 313-4900		
Cynthia Brouwers, Engineering Specialist (410) 313-6447		
Major Discharge:		
Howard County Police Department, 911 or (410) 313-3200	N/A	
Howard County Fire Department, 911 or (410) 313-6000		
Howard County Bureau of Utilities, (410) 313-4900		
Emergency Response Contractors Apex Companies, LLC (800) 733-2739 Marcor Remediation, Inc. (800) 666-0741		
National Response Center, (800) 424-8802 (if discharge reaches navigable waters)		
Maryland Department of the Environment, (866) 633-4686		

Note: Recirculating pipe got clogged. Polymer was released thru vent pipe. Keep recirculation schedules implemented to prevent gelling of Polymer.

DISCHARGE NOTIFICATION REPORT FORM

Part A: Discharge Information

General information when reporting a spill to outside authorities:

Owner/Operator:	Primary Contact:
Howard County Department of Public Works 3430 Court House Dr. Ellicott City, MD 21043 (410) 313-2700	Rene Javier, Team Leader Little Patuxent Water Reclamation Plant (LPWRP) 8900 Greenwood Place Savage, MD 20763 (410) 880-5814

Type of Material: partially treated ww	Discharge Date and Time: 4-30-12 10:00 am
Quantity Released: about 2 gals.	Discovery Date and Time: 4-30-12 10:00 am
Quantity Released to a Water Body: none	Discharge Duration: few minutes
Location/Source: Septage Receiving area, clean out flange	
Actions taken to stop, remove, and mitigate impacts of the discharge:	

Affected media:	Notification person: Not Required Telephone contact: Business: 24-hr:
• Air • Water • Soil (circled) • Storm water sewer/POTW • Dike/berm/oil-water separator • Other: _____	

Nature of discharges, environmental/health effects, and damages: none

Injuries, fatalities or evacuation required? N/A

Part B: Notification Checklist

Contact Name, Title, and Phone Number	*Date and Time*	*Name of Person Receiving Call*
All Discharges:		
Bill Holland, Acting, Operations Superintendent, (410) 880-5819		
Mike Porter, Operations Manager, (410) 313-4900		
Cynthia Brouwers, Engineering Specialist (410) 313-6447		
Major Discharge:	N/A	
Howard County Police Department, 911 or (410) 313-3200		
Howard County Fire Department, 911 or (410) 313-6000		
Howard County Bureau of Utilities, (410) 313-4900		
Emergency Response Contractors Apex Companies, LLC (800) 733-2739 Marcor Remediation, Inc. (800) 666-0741		
National Response Center, (800) 424-8802 (if discharge reaches navigable waters)		
Maryland Department of the Environment, (866) 633-4686		

Note: Gasket leaking, replace ASAP

DISCHARGE NOTIFICATION REPORT FORM

Part A: Discharge Information

General information when reporting a spill to outside authorities:

Owner/Operator:
Howard County
Department of Public Works
3430 Court House Dr
Ellicott City MD 21043
(410) 313-2700

Primary Contact:
Rene Javier, Team Leader
Little Patuxent Water Reclamation Plant (LPWRP)
8900 Greenwood Place
Savage, MD 20763
(410) 880-5814

Type of Material: Partially treated Wash water	Discharge Date and Time: 5/8/12 8:15 am
Quantity Released: 25 gals. (estimated)	Discovery Date and Time: 5/8/12 8:15 am
Quantity Released to a Water Body: None	Discharge Duration: About 5 minutes

Location/Source: Primary Clarifier effluent drained into manhole #1 (FC10)

Actions taken to stop, remove, and mitigate impacts of the discharge: Wastewater was absorbed in the ground

Affected media: • Air • Water • Soil • Storm water sewer/POTW • Dike/berm/oil-water separator • Other: _____	Notification person: Telephone contact: Not required Business: 24-hr:

Nature of discharges, environmental/health effects, and damages: none

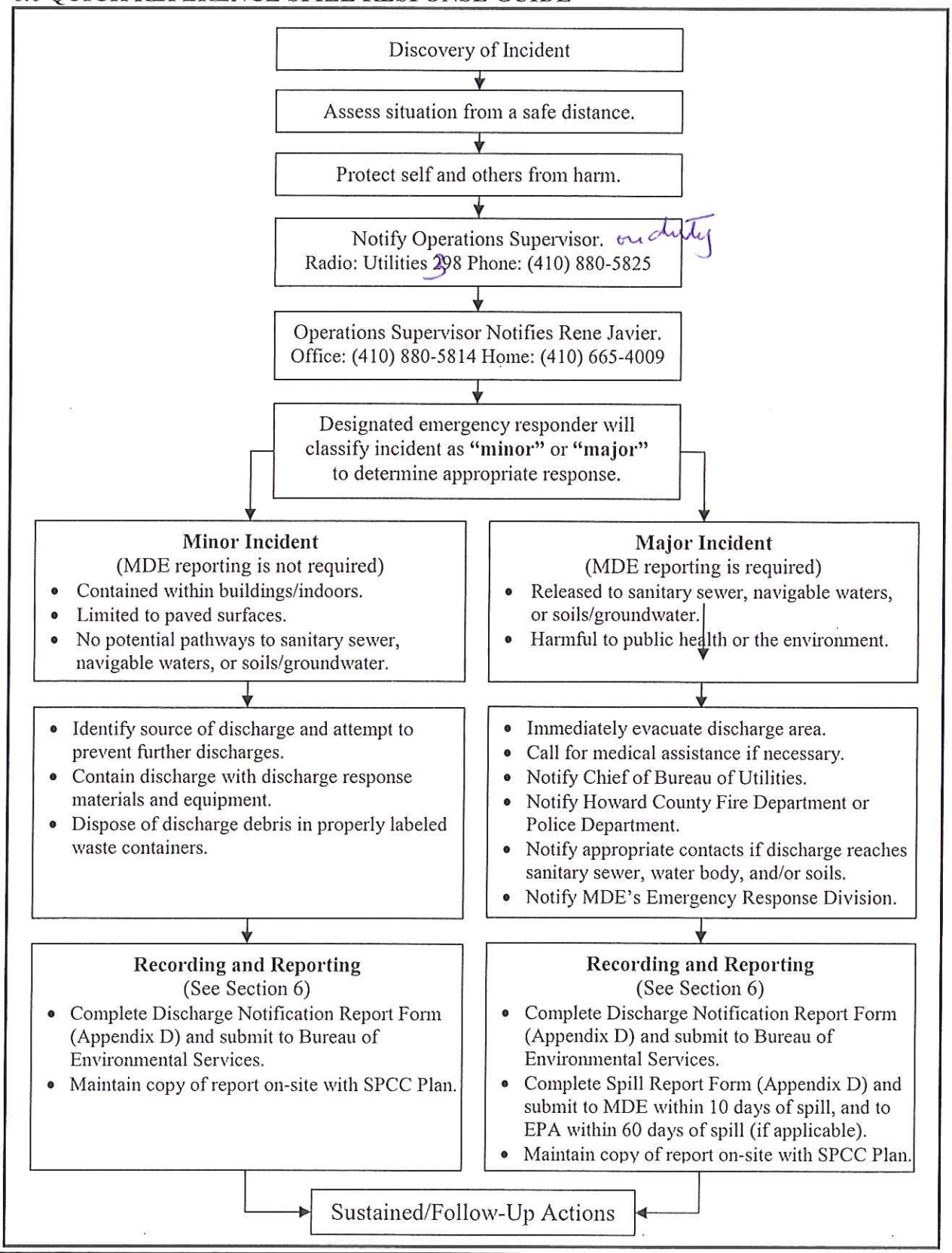
Injuries, fatalities or evacuation required? N/A

Part B: Notification Checklist Not Required

Contact Name, Title, and Phone Number	*Date and Time*	*Name of Person Receiving Call*
All Discharges:		
Bill Holland, Acting Operations Superintendent, (410) 880-5819		
Mike Porter Operations Manager, (410) 313-4900		
Cynthia Brouwers, Engineering Specialist (410) 313-6447		
Major Discharge:	N/A	
Howard County Police Department, 911 or (410) 313-3200		
Howard County Fire Department, 911 or (410) 313-6000		
Howard County Bureau of Utilities, (410) 313-4900		
Emergency Response Contractors Apex Companies, LLC (800) 733-2739 Marcor Remediation, Inc. (800) 666-0741		
National Response Center, (800) 424-8802 (if discharge reaches navigable waters)		
Maryland Department of the Environment, (866) 633-4686		

Note: Quick connect latch came off hose.

6.0 QUICK REFERENCE SPILL RESPONSE GUIDE



DISCHARGE NOTIFICATION REPORT FORM

Part A: Discharge Information	
General information when reporting a spill to outside authorities:	
Owner/Operator: Howard County Department of Public Works 3430 COURT HOUSE DR ELLICOTT CITY, MD, 21043 (410) 313-2700	Primary Contact: Rene Javier, Team Leader Little Patuxent Water Reclamation Plant (LPWRP) 8900 Greenwood Place Savage, MD 20763 (410) 880-5814
Type of Material: LIQUID DISCHARGE FROM BIO-SOLIDS ~~HAN~~ LOADED TRAILER	Discharge Date and Time: 5/13/2012 about 11:00 AM
Quantity Released: About 25 gal	Discovery Date and Time:
Quantity Released to a Water Body: None.	Discharge Duration:
Location/Source: ON ASPHALT NEXT TO DEWATERING Bldg.	
Actions taken to stop, remove, and mitigate impacts of the discharge: Absorbent Material Applied	
Affected media: • Air • Water • Soil • Storm water sewer/POTW • Dike/berm/oil-water separator • Other: _____	Notification person: Telephone contact: Business: 24-hr: NOT REQ'd
Nature of discharges, environmental/health effects, and damages: Injuries, fatalities or evacuation required?	

Part B: Notification Checklist		
Contact Name, Title, and Phone Number	*Date and Time*	*Name of Person Receiving Call*
All Discharges:		
Bill Holland, Acting Operations Superintendent, (410) 880-5819		
Mike Porter Operations Manager, (410) 313-4900		
Cynthia Brouwers, Engineering Specialist (410) 313-6447		
Major Discharge:		
Howard County Police Department, 911 or (410) 313-3200		
Howard County Fire Department, 911 or (410) 313-6000		
Howard County Bureau of Utilities, (410) 313-4900		
Emergency Response Contractors Apex Companies, LLC (800) 733-2739 Marcor Remediation, Inc. (800) 666-0741		
National Response Center, (800) 424-8802 (if discharge reaches navigable waters)		
Maryland Department of the Environment, (866) 633-4686		

NOT REQUIRED

DISCHARGE NOTIFICATION REPORT FORM

Part A: Discharge Information	
General information when reporting a spill to outside authorities:	
Owner/Operator: Howard County Department of Public Works 3430 COURT HOUSE DR ELLICOTT CITY, MD, 21043 (410) 313-2700	Primary Contact: Rene Javier, Team Leader Little Patuxent Water Reclamation Plant (LPWRP) 8900 Greenwood Place Savage, MD 20763 (410) 880-5814
Type of Material: LIQUID DISCHARGE FROM BIO-SOLIDS LOADED TRAILER	Discharge Date and Time: 5/14/2012 about 9am
Quantity Released: About 5 gal & 1 gal	Discovery Date and Time:
Quantity Released to a Water Body: NO	Discharge Duration:
Location/Source: ON ASPHALT NEXT TO DEWATERING BLDG.	
Actions taken to stop, remove, and mitigate impacts of the discharge: LIME & DRYING AGENT ADDED.	
Affected media: • Air • Storm water sewer/POTW • Water • Dike/berm/oil-water separator • Soil • Other: _____	Notification person: Telephone contact: Business: 24-hr: NOT REQ'd
Nature of discharges, environmental/health effects, and damages: Injuries, fatalities or evacuation required?	

Part B: Notification Checklist		
Contact Name, Title, and Phone Number	*Date and Time*	*Name of Person Receiving Call*
All Discharges:		
Bill Holland, Acting Operations Superintendent, (410) 880-5819		
Mike Porter Operations Manager, (410) 313-4900		
Cynthia Brouwers, Engineering Specialist (410) 313-6447		
Major Discharge:		
Howard County Police Department, 911 or (410) 313-3200		
Howard County Fire Department, 911 or (410) 313-6000		
Howard County Bureau of Utilities, (410) 313-4900		
Emergency Response Contractors Apex Companies, LLC (800) 733-2739 Marcor Remediation, Inc. (800) 666-0741	NOT	
National Response Center, (800) 424-8802 (if discharge reaches navigable waters)		
Maryland Department of the Environment, (866) 633-4686		

REQUIRED

DISCHARGE NOTIFICATION REPORT FORM

Part A: Discharge Information	
General information when reporting a spill to outside authorities:	
Owner/Operator: Howard County Department of Public Works 3430 COURT HOUSE DR ELLICOTT CITY, MD, 21043 (410) 313-2700	Primary Contact: Rene Javier, Team Leader Little Patuxent Water Reclamation Plant (LPWRP) 8900 Greenwood Place Savage, MD 20763 (410) 880-5814
Type of Material: LIME	Discharge Date and Time: 5/14/2012 about 2:00 pm
Quantity Released: ABOUT 2 Lbs	Discovery Date and Time:
Quantity Released to a Water Body:	Discharge Duration:
Location/Source: ASPHALT / DEWATERING BLDG .	
Actions taken to stop, remove, and mitigate impacts of the discharge: APPLIED DRYING AGENT TO STOP RUNOFF	
Affected media: • Air • Water • (Soil) • Storm water sewer/POTW • Dike/berm/oil-water separator • Other: _____	Notification person: Telephone contact: Business: NOT REQ'd 24-hr:
Nature of discharges, environmental/health effects, and damages: Injuries, fatalities or evacuation required?	

Part B: Notification Checklist		
Contact Name, Title, and Phone Number	*Date and Time*	*Name of Person Receiving Call*
All Discharges:		
Bill Holland, Acting Operations Superintendent, (410) 880-5819		
Mike Porter Operations Manager, (410) 313-4900		
Cynthia Brouwers, Engineering Specialist (410) 313-6447		
Major Discharge:		
Howard County Police Department, 911 or (410) 313-3200		
Howard County Fire Department, 911 or (410) 313-6000		
Howard County Bureau of Utilities, (410) 313-4900		
Emergency Response Contractors Apex Companies, LLC (800) 733-2739 Marcor Remediation, Inc. (800) 666-0741		
National Response Center, (800) 424-8802 (if discharge reaches navigable waters)		
Maryland Department of the Environment, (866) 633-4686		

NOT REQUIRED

Lime applied on Asphalt to treat liquid discharge from Bio-solids loaded truck was washed away by Rain water.

DISCHARGE NOTIFICATION REPORT FORM

Part A: Discharge Information	
General information when reporting a spill to outside authorities:	
Owner/Operator: Howard County Department of Public Works 3430 COURT HOUSE DR ELLICOTT CITY, MD, 21043 (410) 313-2700	Primary Contact: Rene Javier, Team Leader Little Patuxent Water Reclamation Plant (LPWRP) 8900 Greenwood Place Savage, MD 20763 (410) 880-5814
Type of Material: LIQUID DISCHARGE FROM BIOSOLIDS LOADED TRAILER	Discharge Date and Time: MAY 5, 2012 about 9:00 AM
Quantity Released: ABOUT 20 GAL	Discovery Date and Time:
Quantity Released to a Water Body: NO	Discharge Duration: N/A
Location/Source: ASPHALT NEXT TO DEWATERING BLDG.	
Actions taken to stop, remove, and mitigate impacts of the discharge: DILUTED WITH WATER.	
Affected media: • Air • Water • (Soil) • Storm water sewer/POTW • Dike/berm/oil-water separator • Other: _____	Notification person: Telephone contact: Business: 24-hr: NOT REQUIRED
Nature of discharges, environmental/health effects, and damages; Injuries, fatalities or evacuation required?	

Part B: Notification Checklist		
Contact Name, Title, and Phone Number	*Date and Time*	*Name of Person Receiving Call*
All Discharges:		
Bill Holland, Acting Operations Superintendent, (410) 880-5819		
Mike Porter Operations Manager, (410) 313-4900		
Cynthia Brouwers, Engineering Specialist (410) 313-6447		
Major Discharge:		
Howard County Police Department, 911 or (410) 313-3200		
Howard County Fire Department, 911 or (410) 313-6000		
Howard County Bureau of Utilities, (410) 313-4900		
Emergency Response Contractors Apex Companies, LLC (800) 733-2739 Marcor Remediation, Inc. (800) 666-0741		
National Response Center, (800) 424-8802 (if discharge reaches navigable waters)		
Maryland Department of the Environment, (866) 633-4686		

NOT REQUIRED

APPENDIX H

TRAINING OUTLINE AND ATTENDANCE SHEET

Sample Pollution Prevention Training Outline

Module 1

- Purpose of SWPPP
- NPDES/SWPPP requirements
- SWPPP contents
- Hydrology and water quality basics

Module 2

- Topic: Good Housekeeping Practices
    - Solid and hazardous waste management
    - Waste, garbage and floatable debris
    - Dust generation and vehicle tracking
- Topic: Materials Management
    - Labeling
    - Container compatibility
    - Container storage

Module 3

- Topic: Minimize exposure
- Topic: Maintenance
    - Used oil and spent solvent management*
    - Fueling procedures*
    - Painting procedures*
    - Used battery management
- Topic: Salt Storage

Module 4

- Topic: Spill Response
    - Spill Prevention
    - Spill Handling
        - Agency Notification
        - Spill Kits/Response Equipment
        - Spill Prevention Control and Countermeasure Plan
    - Spill Documentation

Module 5

- Topic: Stormwater Management
    - Erosion and sediment controls
    - Management of runoff
- Topic: Monitoring and Inspection Requirements
    - Effluent Limits
    - Non-stormwater discharges
    - Monitoring
    - Inspections

RECORD OF ANNUAL STORMWATER POLLUTION PREVENTION TRAINING

Annual training will be scheduled and conducted for stormwater pollution prevention to ensure adequate understanding of this SWPPP Plan at FACILITY. The outline of the training including topics covered is attached to this record.

Date of Training: _____

Instructor Name: _____

Subjects Covered: _____

_____

_____

_____

Employees in Attendance:

1.	**13.**
2.	**14.**
3.	**15.**
4.	**16.**
5.	**17.**
6.	**18.**
7.	**19.**
8.	**20.**
9.	**21.**
10.	**22.**
11.	**23.**

APPENDIX I

HOWARD COUNTY STORMWATER PROGRAM INSPECTION SCHEDULE

Howard County SWP3 Inspection Schedule

				Quarter 3, 2014			Q
Facility	**Inspection Type**	**Responsibility**	**June**	**July**	**August**	**September**	**October**
Cooksville Vehicle Maintenance Shop and Radio Tower	NOI	BES	Submitted:				
	Routine Facility	Facility			X		
	Quarterly Visual	BES (Document when Sampling Event Occurs)					
	CSCE	BES					
Dayton Vehicle Maintenance Shop	NOI	BES	Submitted:				
	Routine Facility	Facility			Replaced by CSCE		
	Quarterly Visual	BES (Document when Sampling Event Occurs)					
	CSCE	BES		X			
Mayfield Vehicle Maintenance Shop	NOI	BES	Submitted:				
	Routine Facility	Facility			Replaced by CSCE		
	Quarterly Visual	BES (Document when Sampling Event Occurs)					
	CSCE	BES				X	
Little Patuxent Water Reclamation Plant and Radio Tower	NOI	BES	Submitted:				
	Routine Facility	Facility			X		
	Quarterly Visual	BES (Document when Sampling Event Occurs)					
	CSCE	BES					X
Recreation and Parks	NOI	BES	Submitted:				
	Routine Facility	Facility			X		

Howard County SWP3 Inspection Schedule

Facility	Inspection Type	Responsibility	June	July	August	September	October
Headquarters	Quarterly Visual	BES (Document when Sampling Event Occurs)					
	CSCE	BES					
Ridge Road Vehicle Maintenance Shop	NOI	BES	Submitted:				
	Routine Facility	Facility			X		
	Quarterly Visual	BES (Document when Sampling Event Occurs)					
	CSCE	BES					
Bureau of Utilities Maintenance Shop	NOI	BES	Submitted:				
	Routine Facility	Facility			X		
	Quarterly Visual	BES (Document when Sampling Event Occurs)					
	CSCE	BES					

Howard County SWP3 Inspection Schedule

uarter 4, 2014		Quarter 1, 2015			Quarter 2, 2015		
November	December	January	February	March	April	May	June
X			X			Replaced by CSCE	
						X	
X			X			X	
X			X			X	
Replaced by CSCE			X			X	
X			X			Replaced by CSCE	

Version 1.0, 3.25.14

Howard County SWP3 Inspection Schedule

November	December	January	February	March	April	May	June
					X		
X			X			Replaced by CSCE	
						X	
X			X			Replaced by CSCE	
						X	

APPENDIX J

ROUTINE FACILITY AND CSCE CHECKLIST

Site:

Inspectors:

Date:

Weather:

Inspection Item	Pass/Fail	Observation	Recommended Corrective Action	Responsible For Corrective Action	Estimated Completion Date	Actual Completion Date
Records Review						
Must have copy of Notice of Intent and Permit on-site						
Must have copy of SWPPP on-site						
Must have copy of SPCC on-site						
Must have inspection records on site (Routine, Quarterly Visual, Annual CSCE)						
Must have spill records/log on-site						
Must have waste records/manifests on-site						
Must have oil/water separator inspection and pump out records on-						
Must have corrective action records on-site						
Effectiveness of Onsite Spill Prevention and Response Measures						
Outdoor areas must be free of spilled material or evidence of release						
Storage/waste containers must be in good condition						

Inspection Item	Pass/Fail	Observation	Recommended Corrective Action	Responsible For Corrective Action	Estimated Completion Date	Actual Completion Date
Storage/waste containers must be clearly labeled						
Spill kits must be available and stocked						
Secondary containment units must be free from liquid/debris						
Inspection of Stormwater Control Measures						
Material storage areas must be managed to prevent discharge						
Salt storage piles/containers must be managed to prevent discharge						
Areas of equipment/vehicle must be clean and neat						
Areas of equipment/vehicle maintenance must be neat						
Areas of equipment/vehicle storage must be neat						
Procedures identified in the SWP3 for vehicle/equipment practices must be in place (i.e. use of drip pans, performing work indoors, etc.)						
Fueling areas must be in good condition						
Spill/overfill protection must be present and in good working condition						
Evidence of proper management of waste, garbage, or flotable debris must exist						
Evidence of dust generation must not exist						

Inspection Item	Pass/Fail	Observation	Recommended Corrective Action	Responsible For Corrective Action	Estimated Completion Date	Actual Completion Date
Evidence of off-site tracking of waste materials or sediment near entrances and exits must not exist						
Evidence of tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas must not exist						
Evidence of non-stormwater discharges must not exist						
Erosion and sediment controls must be in place and working						
Evidence of runoff must not be present						
Evidence of run-on from off-site must not exist						
Inspection of BMPs and Housekeeping Effectiveness						
Areas must be free of trash and debris						
Waste receptacles must be available and intact						
Dumpsters must be closed and free of leaks						
ASTs must be in good condition and free of leaks						
Waste containers must be properly stored						
Hazardous waste must be removed within 90 days of storage in the main accumulation area						
BMPs must be implemented and maintained as required						

Inspection Item	Pass/Fail	Observation	Recommended Corrective Action	Responsible For Corrective Action	Estimated Completion Date	Actual Completion Date
Inspection of Structural Controls and Maintenance Program						
There must be adequate drainage (no flooding)						
Structural controls must be in good condition						
Maintenance must be performed on structural controls, if applicable						
Inspection of Outfalls/Drainage System						
Outfalls must be clean and free of debris						
Outfalls must be without staining or signs of contaminant release						
Evidence of discharges to surface waters or outfalls must not exist						
Evidence of pollutants in drainage systems must not exist						

Signatures:

By signing this inspection record, I certify that to the best of my knowledge and observation this site is in compliance with the site Stormwater Pollution Prevention Plan and the General Discharge Permit for Discharges Associated with Industrial Activities, unless otherwise noted above.

Site:

Inspectors:

Date:

Weather:

Inspection Item	Yes/No	Observation	Recommended Corrective Action	Estimated Completion Date	Actual Completion Date
Records Review					
Copy of Notice of Intent and Permit on-site?					
Copy of SWPPP on-site?					
Copy of SPCC on-site?					
Inspection records on site? (Routine, Quarterly Visual, Annual CSCE)					
Spill records/log on-site?					
Waste records/manifests on-site?					
Oil/water separator inspection and pump out records on-site?					
Training records on-site?					
Structural control maintenance records available?					
Corrective action records on-site?					
Effectiveness of Spill Prevention and Response Measures					

Inspection Item	Yes/No	Observation	Recommended Corrective Action	Estimated Completion Date	Actual Completion Date
Outdoor areas free of spilled material or evidence of release?					
Are storage/waste containers in good condition?					
Storage/waste containers clearly labeled?					
Spill kits available and stocked?					
Are secondary containment units free from liquid/debris?					
Inspection of Stormwater Control Measures					
Material storage areas managed to prevent discharge?					
Salt storage piles/containers managed to prevent discharge?					
Areas of equipment/vehicle cleaning neat?					
Areas of equipment/vehicle maintenance neat?					
Areas of equipment/vehicle storage neat?					
Procedures identified in the SWP3 for vehicle/equipment practices in place (i.e. use of drip pans, performing work indoors, etc.)?					
Fueling areas in good condition?					
Spill/overfill protection present and in good working condition?					

Inspection Item	Yes/No	Observation	Recommended Corrective Action	Estimated Completion Date	Actual Completion Date
Evidence of improper management of waste, garbage, or flotable debris?					
Evidence of dust generation?					
Evidence of off-site tracking of waste materials or sediment near entrances and exits?					
Evidence of tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas?					
Evidence of non-stormwater discharges?					
Erosion and sediment controls in place and working?					
Evidence of runoff present?					
Evidence of run-on from off-site?					
Inspection of BMPs and Housekeeping Effectiveness					
Areas free of trash and debris?					
Waste receptacles available and intact?					
Dumpsters closed and free of leaks?					
ASTs in good condition and free of leaks?					

Inspection Item	Yes/No	Observation	Recommended Corrective Action	Estimated Completion Date	Actual Completion Date
Waste containers properly stored?					
Hazardous waste removed within 90 days of storage in the main accumulation area?					
BMPs being implemented and maintained as required?					
Inspection of Structural Controls and Maintenance Program					
Adequate drainage (no flooding)?					
Structural controls in good condition?					
Maintenance being performed on structural controls, if applicable?					
Inspection of Outfalls/Drainage System					
Outfalls clean and free of debris?					
Outfalls without staining or signs of contaminant release?					
Evidence of discharges to surface waters or outfalls?					
Evidence of pollutants in drainage systems?					
SWPPP Document Review					
Have there been changes at the faclity which would require an update of the plan?					
Are the Pollution Prevention Team members up to date?					

Inspection Item	Yes/No	Observation	Recommended Corrective Action	Estimated Completion Date	Actual Completion Date
Are all industrial activities onsite described in the plan?					
Is the map in the SWPPP up to date and reflects current locations of industrial activities and material/waste storage?					
Is modification of the SWPPP necessary at this time?					
Signatures:					
Note: This inspection may be conducted in place of one of the quarterly routine faclity inspections.					

APPENDIX K

QUARTERLY VISUAL MONITORING FORM

Quarterly Visual Monitoring Form

Fill out a separate form for each outfall sampled.

Sample Location					
Quarter / Year:		**Date / Time Collected:**		**Date / Time Examined:**	
Qualifying Storm Event?	Yes No	**Runoff Source:**	Rainfall Snowmelt		
Collector's Name & Title					
Examiner's Name & Title					

Parameter	Parameter Description	Parameter Characteristics
1. Color	Does the stormwater appear to have any color? **Yes** **No (Clear)**	If Yes, describe: *Yellow Brown Red Gray Other*:
2. Clarity	Is the stormwater clear? **Yes** **No**	If not clear, which of the following best describes the clarity of the stormwater? *Suspended Solids Milky/Cloudy Opaque Other:*
3. Oil Sheen	Can you see a rainbow effect or sheen on the water surface? **Yes** **No**	Which best describes the sheen? *Rainbow sheet Floating oil globules Other:*
4. Odor	Does the sample have an odor? **Yes** **No**	If Yes, describe: *Chemical Musty Rotten Eggs Sewage Sour Milk Oil/Petroleum Other:*
5. Floating Solids	Is there anything on the surface of the sample? **Yes** **No**	If Yes, describe: *Suds Oily Film Garbage Sewage Water Fowl Excrement Other:*
6. Suspended Solids	Is there anything suspended in the sample? **Yes** **No**	Describe:
******Leave sample undisturbed for 30 minutes.******		
7. Settled Solids	Is there anything settled on the bottom of the sample? **Yes** **No**	Describe: (*note type, size and material after sample is not disturbed for 30 minutes)*
8. Foam	Does foam or material form on the top of the sample surface if you shake it? **Yes** **No**	Describe:

9. If there are any visible indicators of pollution identify (1) where the pollution may come from and (2) any corrective actions taken.

Stormwater Collector's Signature and Date:

Stormwater Examiner's Signature and Date:

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

Instructions for Completing the Visual Monitoring Form

Per PART V. INSPECTIONS, MONITORING, AND REPORTING, you must collect a stormwater sample from each outfall once each quarter for the entire permit term and conduct a visual assessment of each sample. You must follow the monitoring procedures outlined in Part V.C. These samples should be collected in such a manner that they are representative of the stormwater discharge from that outfall. Each assessment must be kept onsite with your SWPPP and available for inspection and review by the Department at anytime.

First, fill out all information on the top of the visual monitoring form. A qualifying storm event is any storm where there is a measurable discharge. Then, take a grab sample in a clear container. Evaluate the sample in a well-lit area for the following parameters:

1. **Color:** Record the best description of the sample color in the appropriate space on the form.
2. **Clarity**: This parameter refers to how cloudy the sample is. It is *usually* an indication of fewer pollutants in the water if the sample is clear or transparent. If the clarity has changed since the last sample, try to identify what might have caused this to happen.
   - **Clear –** Sample doesn't block any light; can be seen through regardless of color.
   - **Cloudy –** Sample blocks some light; objects not clear but can be identified looking through the sample.
   - **Very Cloudy –** Sample blocks most light; objects cannot be identified looking through the sample.
   - **Opaque –** Sample blocks all light; objects cannot be seen when looking through the sample.
3. **Oil Sheen:** Record whether or not an oil sheen is present. If a film of iridescent color is noted on the surface of the sample or a rainbow effect appears to be floating on the surface of the water, this usually indicates oil is present.
4. **Odor:** If sample has no odor other than natural rainwater or snowmelt, write "NO" on the visual monitoring form. Note the presence of any of the following odors if detected, such as gasoline, diesel, oil, solvents (WD-40, other petroleum products, etc.), garbage, fishy, sweet/sugary, any other unusual odors not normally present in clean runoff from the area sampled.
5. **Floating Solids:** A contaminated flow may contain solids or liquids floating on the surface. Identifying floatables can aid in finding the source of the contamination. Examples of floatables are spoiled food products, oils, plant parts, solvents, sawdust, foams and fuel. Give a general description of the type of floating solids present (wood chips, leaf debris, algae, etc) in the general comments section for each sample. Identify amount of floating solids as described below.
   - **High –** More than 20% of the surface of the sample is covered with floating solids.
   - **Moderate –** Less than 20% of the surface of the sample is covered with floating solids.
   - **Slight –** Only a few floating particles observed on the surface of the sample.
   - **None –** No floating solids present on the surface of the sample.
6. **Suspended solids:** Record whether or not suspended solids are present in the sample. Suspended solids are particles floating inside the column of water, not on top, and may contribute to changes in water color or clarity. Cracked or deteriorated concrete or peeling surface paint at an outfall usually indicates the presence of severely contaminated discharges. Contaminants causing this type of damage are usually very acidic or basic.

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

Leave the sample undisturbed for 30 minutes to allow the water and anything in it to settle.

7. **Settled Solids:** After 30 minutes has passed, give a general description of the type of settled solids present (sand, decayed plant matter, rust particles, etc.) in the general comments section.
8. **Foam:** After completing #7, shake the bottle gently. Record foam results on the form as they most closely match one of the descriptions listed below.
   - **None –** Most bubbles break down within ten (10) seconds of shaking; only a few large bubbles persist longer than ten (10) seconds.
   - **Moderate –** Many small bubbles are present but these bubbles persist for less than two (minutes) after shaking.
   - **High –** Many small bubbles are present and they persist longer than two (2) minutes after shaking.
9. Detail any concerns, corrective actions taken and any other indicators of pollution present in the sample. This should include the identified source if there are visible indicators present in the sample. The person performing test must sign and date each form**.**