



**Maryland Department of the Environment**

# 12-SW General Permit

for Stormwater Discharges Associated With Industrial Activity (Final Determination)



**Overview for the 2014  
MD/DC Utilities Association  
Environmental Conference**





# What types of utilities are required to obtain permit coverage?

---

**The MD-DC Utilities Association includes representatives from the region's electric, gas, telecommunications, and sanitary utilities in the region.**

## Primary Utility Examples:

**Steam electric generating plants** as covered by Activity Code SE under Sector O.

➤ Certain discharges associated with coal pile runoff may require an individual permit with appropriate ELGs.

**Treatment works** as covered by Activity Code TW under Sector T.

➤ 1 MGD or greater in design flow.

**Transportation Sector or Department of Public Works** under Department of Public Works as covered by Activity Code DPW under Sector AD.a or SIC 4212 under Transportation Sector P.

> These are generally fleet support activities are covered only if vehicle maintenance is performed which includes: 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.





# Application Process

You must submit a Notice of Intent (NOI), updated Stormwater Pollution Prevention Plan (SWPPP) and fee **FOR EACH FACILITY**.

Category	NOI, SWPPP & Fee Submission Deadline
<b>Existing Dischargers</b> – that are <u>not</u> subject to <a href="#">Chesapeake Bay Restoration Requirements</a> .	Within 6 months from effective date ( <b>June 30, 2014</b> ). Authorization to discharge under 02-SW continues in the interim.
<b>Existing Dischargers</b> – that are subject to <a href="#">Chesapeake Bay Restoration Requirements</a> .	Within 1 year from effective date ( <b>December 31, 2014</b> ). Authorization to discharge under 02-SW continues in the interim.
<b>Other Dischargers</b> – in operation, but <u>not covered</u> under 02SW or other permit.	<b>Immediately</b> , to minimize the time discharges from the facility will continue to be unauthorized





## NOI Requires - Chesapeake Bay Specific

---

If your facility meets ALL of these criteria :

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

THEN you must provide:

- 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).





# Restoration Options

---

- Design Manual or Proprietary Practices
  - Examples: Green Roof or Cisterns
- Accounting Guidance Practices
  - Examples: Street Sweeping or replacing pavement with green space.
- Equivalent control measures
  - Achieve reduction of 5.4 lbs total nitrogen (TN) per year is equivalent to restoration of one acre of impervious surface area.
  - New controls required for erosion and sediment control or reduced use of fertilizer.
  - New controls to achieve the benchmarks for nitrogen
  - Reducing an existing TN load allocation
- Off-Site





# Registration

---

- You have sent in your Notice of Intent (NOI), Payment and Stormwater Pollution Prevention Plan (SWPPP). What next?




**MDE will notify you.**

- 1) To resolve any issues**
- 2) To register your facility under the new permit.**





# Search Tool



THE DEPARTMENT OF THE  
**ENVIRONMENT**

[Maryland.gov](#) [Phone Directory](#) [State Agencies](#) [Online Services](#)

[HOME](#) [MARYLANDER](#) [BUSINESS](#) [RESEARCH CENTER](#) [NEWSROOM](#) [email friend](#) [print page](#)

**Water Programs**  
**Wastewater Permits Program**

**Wastewater Permits Interactive Search Portal**  
**Enter or select search values in one or more text box or dropdown search fields below**  
**Please note:** Wild card characters are not supported in your search values but partial values are  
It may take around 30 seconds to return results

Facility Name:

Address:

City:

Zip Code:

State Num.:

NPDES Number:

County:

Watershed:

Type:

Status:

[Click here for field information \(PDF\)](#)

237 facilities found

Facility Name	Address	City	Zip Code	County	State Num.	NPDES Num.	Status
4600 East Fayette, LLC	4600 E Fayette St	Baltimore	21224	Baltimore City	02SW1987	MDR001987	History
A & A Marble Crafters, Inc.	409 S Spring St	Baltimore	21231	Baltimore City	02SW1592	MDR001592	History
A & X Steel and Aluminum Co.	2825 Annapolis Rd	Baltimore	21230	Baltimore City	02SW2411	MDR00	History
A & X Steel and Aluminum Co.	2825 Annapolis Rd	Baltimore	21230	Baltimore City	12SW2411	MDR002411	Active
A. S. Tours, Inc	2400 Sisson St	Baltimore	21211	Baltimore City	02SW1647	MDR001647	History
A2Z Environmental Group, LLC	311 S Haven St	Baltimore City	21224	Baltimore City	12SW2428	MDR002428	Pending
All Supplies & Parts, Inc. - Asap Compressors	1411 Bush St	Baltimore	21230	Baltimore City	02SW1138	MDR001138	History
All Supplies & Parts, Inc. - Asap Compressors	1411 Bush St	Baltimore	21230	Baltimore City	12SW1138	MDR001138	Active
American Limousines, Inc.	4401 E Fairmount Ave	Baltimore	21224	Baltimore City	02SW1658	MDR001658	Active





# Registered...now what?

---

## Binder at your facility with:

- Registration letter (you need to send to MS4)
- Copy of Permit
- SWPPP (updated)
- Quarterly Visual Inspections
- Training Records
- Benchmark Monitoring
- Comprehensive Annual Inspection
- Maintenance Records (Oil Water Separator or other device)
- Corrective Action Records







# Visual Monitoring

## Quarterly Samples:

1. No lab required.
2. Form part of permit.
3. Important to keep records.

General Discharge Permit No. 12-SW  
Appendix B: Page 2 of 3

**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 sheen   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.		





# Benchmarks Selected

1. Agricultural Chemicals
2. Industrial Inorganic Chemicals
3. Soaps, Detergents, Cosmetics and Perfumes
4. Landfills and Land Application Sites
5. Automobile Salvage Yards
6. Scrap Recycling & Waste Recycling Facilities (except source separated)
7. Grain Mill Products
8. Fats and Oils Products
9. Fabricated Metal Products

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 <sup>1</sup>	0.082	mg/L	1/quarter	Grab

<sup>1</sup> 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.

**AFTER 4 QUARTERS, IF YOU HAVE MET  
BENCHMARKS CONTACT COMPLIANCE TO  
DISCONTINUE**





# Comprehensive Evaluation

---

Comprehensive Site Compliance Evaluation **once a year, to be kept onsite with SWPPP.**

- Industrial materials, residue or trash
- Leaks or spills within the past three years;
- Offsite tracking where vehicles enter or exit the site;
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
- Evidence of pollutants entering the drainage or pollutants discharging to surface waters at facility outfalls;
- The condition of and around any outfall, including flow dissipation measures to prevent scouring;
- Training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs and
- Visual and analytical monitoring results from the past year.

**EPA Provides a Template that may be used, which is on our website.**





# Corrective Actions

---

When something is wrong, you must address it and document what you did.

- Within **24 hours** of discovery of any condition listed, you must document discovery.
- Within **14 days** of discovery of any condition listed, you must document your corrective action.
- 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.





# When to Notify MDE

---

1. Corrective Actions
2. Monitoring Reports for Benchmarks (DMRs)
3. Restoration update at end of year 4 for all registrations beginning with 12-SR
4. Illicit discharges.





# Inspector shows up...

---

- Be prepared to present your SWPPP.
- Review your records with inspector.
- Staff may randomly be asked questions.
- Provide access to all stormwater controls.
- Explain any problems and what you have done to address them.





# Compliance Problems

---

## 1) No SWPPP Developed

- Since 12-SW requires SWPPP upfront, this should be less of an issue going forward.
- Common in change of ownership situations.





# Compliance Problems

---

2) Control Measures described in SWPPP are not used.

- Street Sweeping is listed in SWPPP, but not used.
- Site map not up-to-date.
- Outfalls missing from site map.
- Sump no longer used.







# Compliance Problems

---

## 3) No SWPPP on-site.

- Some corporations prefer on-line. Make sure you have easy access.





# Compliance Problems

---

4) SWPPP not signed.





# Compliance Problems

---

5) Stormwater pollution prevention team not up-to-date.





# Compliance Problems

---

6) On-site staff not familiar with SWPPP.





# Compliance Problems

---

- 7) Improper collection of visual assessment samples.
  - Representative sample is important.





# Monitoring Guidance

We provide EPA's Guidance Document for monitoring and sampling.



EPA 832-B-09-003



## Industrial Stormwater Monitoring and Sampling Guide

March 2009

**Final Draft**





# Compliance Problems

---

- 8) Uncovered dumpster or leaking storage.
  - Placement of dumpsters next to stormdrain.
  - Unlabeled containers.





# Compliance Problems

---

- 9) Poor employee/contract staff training.
  - Practices not being used evident by observing housekeeping (oil stains on pavement).







# Compliance Problems

---

10) Inspection or monitoring records are not kept with SWPPP.





# Compliance Problems

---

## 11) Unauthorized discharges:

- Vehicle washing.
- Internal floor drains.





# Compliance Problems

---

## 12) Poor maintenance:

- Poor maintenance of controls (filter fabric torn).
- Overgrown drainage areas.
- Stormdrains filled with sediment.





# Questions?

---

**Maryland Department of the Environment**

**Water Management Administration  
Industrial and General Permits Division**

**Paul Hlavinka**  
**[paul.hlavinka@maryland.gov](mailto:paul.hlavinka@maryland.gov)**  
**410-537-3323**

1800 Washington Boulevard | Baltimore, MD 21230-1718  
410-537-3000 | TTY Users: 1-800-735-2258  
[www.mde.maryland.gov](http://www.mde.maryland.gov)

