2022

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Vice President
RT Environmental Services, Inc.

April 13, 2021

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AGENDA

- SPCC/PPC Plans at Asphalt Plants
- Stormwater Permits
  - PAG-01
  - PAG-02
  - PAG-03 (Upcoming Changes)
- Management of Fill Update
- Vanadium

SPCC/PPC PLANS
AT ASPHALT PLANTS

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SPCC/PPC PLANS AT ASPHALT PLANTS

WHO REVIEWED THEIR SPCC PLAN SINCE APRIL 2021 ENVIRONMENTAL SEMINAR?

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Key Elements of SPCC/PPC Plans

- Description of the Facility
- Description of How the Plan is Implemented
- Spill Leak Prevention and Response
- Countermeasures
- Emergency Spill Control Network
- Revisions/Updates to Plan

- SPCC/PPC is a “Living Document” – Needs to be Updated if Changes are Applicable

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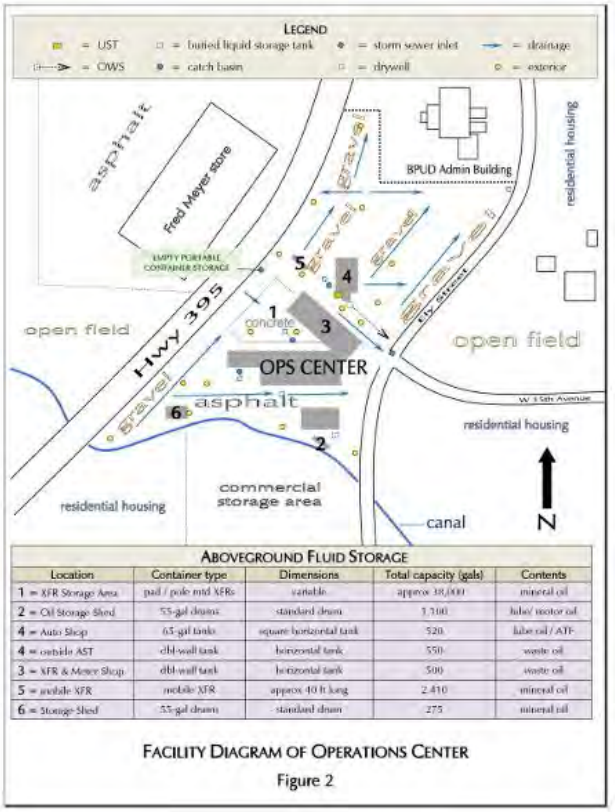
Key Elements of SPCC/PPC Plans

- **Description of the Facility Operations**
- Include Maps identifying Features
- Oil Storage Areas (drums, tanks, transformers, etc.)
- Key Personnel
- Details are a Key Component of a Good SPCC Plan



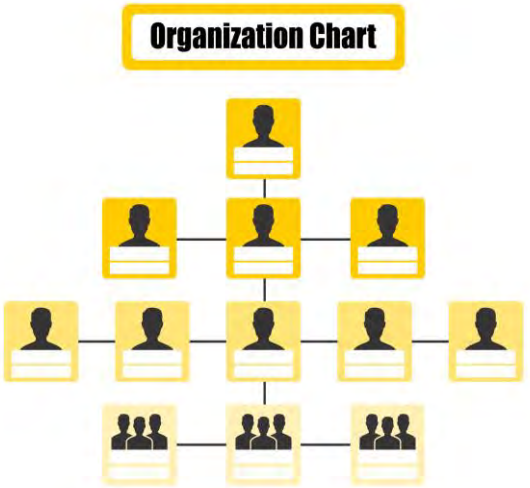
ABOVEGROUND FLUID STORAGE

Location	Container type	Dimensions	Total capacity (gals)	Contents
1 = XFR Storage Area	pad / pole mtd XFRs	variable	approx 38,000	mineral oil
2 = Oil Storage Shed	55-gal drums	standard drum	1,100	lube/ motor oil
4 = Auto Shop	65-gal tanks	square horizontal tank	520	lube oil / ATF
4 = cribble AST	dbl-wall tank	horizontal tank	550	waste oil
3 = XFR & Meter Shop	dbl-wall tank	horizontal tank	500	waste oil
5 = mobile XFR	mobile XFR	approx 40 ft long	2,410	mineral oil
6 = Storage Shed	55-gal drums	standard drum	275	mineral oil

FACILITY DIAGRAM OF OPERATIONS CENTER
Figure 2

Key Elements of SPCC/PPC Plans

- **Description of How the Plan is Implemented**
  - Plan Organization (What's Located Where in the Plan?) EM Personnel may need to review and find information in an emergency.
  - Who is the SPCC Coordinator?
  - Who are the Emergency Coordinators, Alternates?
  - Document Responsibilities of the SPCC Coordinator and Emergency Coordinators
  - Management Approval of the Plan



Key Elements of SPCC/PPC Plans

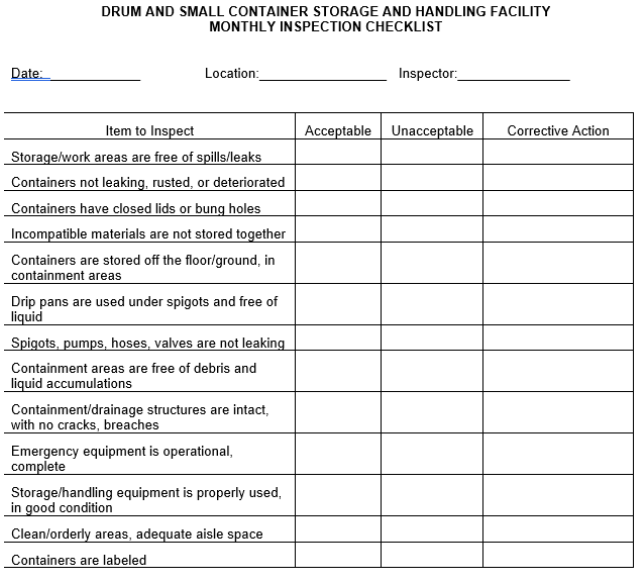
Spill Leak Prevention and Response

Inspections (Frequency and Documentation)

Make sure if your Plan says monthly, you have records of monthly inspections.

Make sure if your Plan says daily, you have records of daily inspections.

Maintain Records for Minimum of Three Years



DRUM AND SMALL CONTAINER STORAGE AND HANDLING FACILITY
MONTHLY INSPECTION CHECKLIST

Date:_____ Location:_____ Inspector:_____

Item to Inspect	Acceptable	Unacceptable	Corrective Action
Storage/work areas are free of spills/leaks			
Containers not leaking, rusted, or deteriorated			
Containers have closed lids or bung holes			
Incompatible materials are not stored together			
Containers are stored off the floor/ground, in containment areas			
Drip pans are used under spigots and free of liquid			
Spigots, pumps, hoses, valves are not leaking			
Containment areas are free of debris and liquid accumulations			
Containment/drainage structures are intact, with no cracks, breaches			
Emergency equipment is operational, complete			
Storage/handling equipment is properly used, in good condition			
Clean/orderly areas, adequate aisle space			
Containers are labeled			

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Key Elements of SPCC/PPC Plans

Spill Leak Prevention and Response

APPENDIX "A-1"

YEAR: _____ LOCATION: _____

PLANT NAME

PLANT ENVIRONMENTAL INSPECTION REPORT

(Tanks/Containers #1, 2, 3,4,5,6,7,8,9, 10, 11)

D A I L Y

ASPHALT, DIESEL, HEATING OIL TANKS, PIPING, PUMPS, VALVES, HEATER, ETC.

(CHECK FOR: significant corrosion, leakage, damage, proper supports, proper labeling, etc.)

DATE	NAME (PLEASE PRINT)	(SIGNATURE)	Title	SATISFACTORY	NEEDS ATTENTION (SEE ATTACHED) (Correction Action Report)	REPORT#
			Plant Supt	☐	☐	
			Plant Supt	☐	☐	
			Plant Supt	☐	☐	
			Plant Supt	☐	☐	
			Plant Supt	☐	☐	
			Plant Supt	☐	☐	
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			Plant Supt	☐	☐	
			Plant Supt	☐	☐	

ABOVEGROUND STORAGE TANK, TRANSFER PIPELINE, AND LOADING/UNLOADING FACILITY MONTHLY INSPECTION CHECKLIST

Date: _____ Location: _____ Inspector: _____

This inspection record must be completed *each month* except the month in which an annual inspection is performed. Provide further description and comments, if necessary, on a separate sheet of paper and attach to this sheet. *Any item that receives "yes" as an answer must be described and addressed immediately.

	Yes	No	NA	Descriptions and Comments
Storage Tanks				
Tank surfaces show signs of leakage	☐	☐	☐	
Tanks are damaged, rusted or deteriorated	☐	☐	☐	
Bolts, rivets, or seams are damaged	☐	☐	☐	
Tank supports are deteriorated or buckled	☐	☐	☐	
Tank foundations have eroded or settled	☐	☐	☐	
Level gauges or alarms are inoperative	☐	☐	☐	
Vents are obstructed	☐	☐	☐	
Secondary containment is damaged or stained	☐	☐	☐	
Water/product in interstice of double-walled tank	☐	☐	☐	
Dike drainage valve is open or is not locked	☐	☐	☐	
Piping				
Valve seals, gaskets, or other appurtenances are leaking	☐	☐	☐	
Pipelines or supports are damaged or deteriorated	☐	☐	☐	
Joints, valves and other appurtenances are leaking	☐	☐	☐	
Buried piping is exposed	☐	☐	☐	
Loading/Unloading and Transfer Equipment				
Loading/unloading rack is damaged or deteriorated	☐	☐	☐	
Connections are not capped or blank-flanged	☐	☐	☐	
Secondary containment is damaged or stained	☐	☐	☐	
Berm drainage valve is open or is not locked	☐	☐	☐	
Oil/Water Separator				
Oil/water separator > 2 inches of accumulated oil	☐	☐	☐	
Oil/water separator effluent has a sheen	☐	☐	☐	
Security				
Fencing, gates, or lighting is non-functional	☐	☐	☐	
Pumps and valves are unlocked if not in use	☐	☐	☐	
Response Equipment				
Response equipment inventory is in complete	☐	☐	☐	

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Key Elements of SPCC/PPC Plans

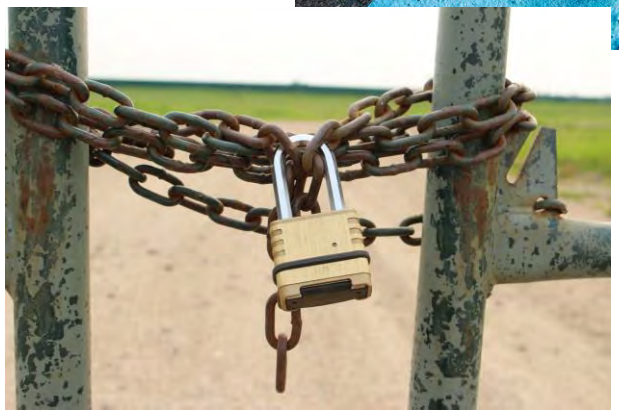
Spill Leak Prevention and Response

Training

Preventative Maintenance

Good House Keeping Practices

Site Security



Key Elements of SPCC/PPC Plans

Countermeasures

Assess the risk. Throughout the emergency as situations can change.

Control the release to the extent possible.

- Onsite or Offsite response actions may be necessary.

Report the release to management and government agencies.

- Reporting to Local, State, Federal Agencies as necessary
- Downstream Users as necessary
- Within 2 hours make the call.
- Document incident information, actions taken, be prepared to answer the Question: Do You Need Help?

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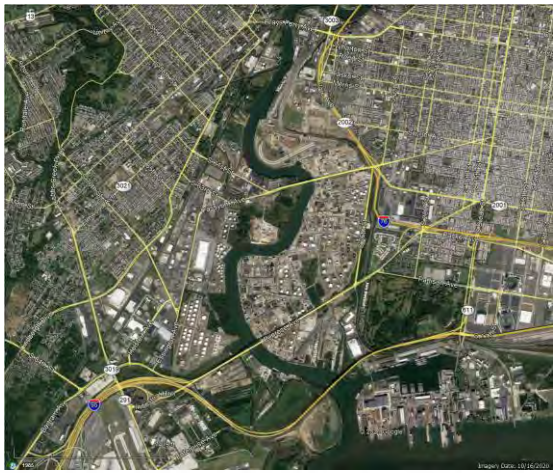
Key Elements of SPCC/PPC Plans

Countermeasures

- Reporting to Local, State, Federal Agencies as necessary
- Discharge of Oil Regulation “Sheen Rule” - NRC
- U.S. EPA Reporting >1,000 gallons in a single discharge or >42 in each of two discharges within a 12-month period which reaches navigable waters



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Key Elements of SPCC/PPC Plans

Countermeasures

Clean up the impacted area as soon as possible. Properly Dispose of Any Waste Generated.

Follow up with preventive measures. Actions which can be implemented to prevent similar incident.

UPDATE THE PLAN

DOCUMENT, DOCUMENT, DOCUMENT

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Key Elements of SPCC/PPC Plans

Countermeasures

Written Report Following an Incident.

1. Information submittal within 60 days of the incident
2. Description of the incident
3. Estimated quantity discharged (can be different than first reported)
4. Assessment of contamination to land, water or air
5. Descriptions of actions to take to prevent similar occurrence
6. A description of downstream notification actions (to assess the effectiveness of the notice process)

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Key Elements of SPCC/PPC Plans

Emergency Spill Control Network

- Review Hospital Information (Outpatient Vs. Emergency Room)
- Review Fire/Police Information
- Downstream Notification Information
- Offsite Emergency Response Contractors (Service Area Changes, Company Changes, etc.)

Key Elements of SPCC/PPC Plans

Revisions/Updates to Plan

- Amend the Plan if a discharge > 1,000 gallons occurs
- Amend the Plan if there are two discharges of >42 gallons in a 12-month period
- Regulation Changes
- If Plan fails in an emergency
- Plant Changes
  - Personnel
  - Equipment (new tanks, new transformers, etc.)
  - Operations
- Downstream Notification Changes

Documentation of the Review and Amendment

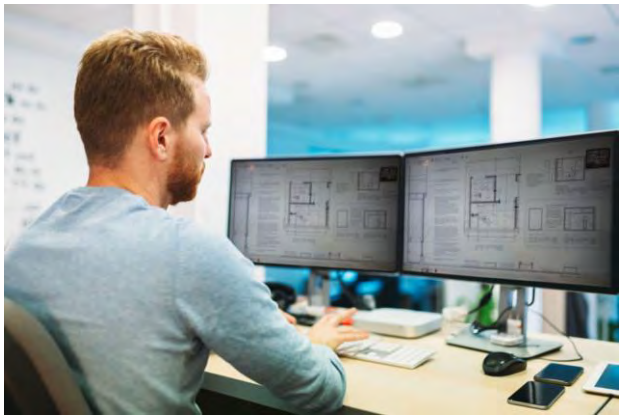
Key Elements of SPCC/PPC Plans

Revisions/Updates to Plan

- U.S. EPA Regional Administrator Can Review and Require Updates following an Inspection of the Facility or After a Substantial Release
- Minimum Review every Five Years
- Review and Update when Changes Occur – **Document the Reviews**

SPCC/PPC PLANS AT ASPHALT PLANTS

WHO'S GOING TO REVIEW THEIR SPCC PLAN AFTER 2022 ENVIRONMENTAL SEMINAR?



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SPCC/PPC Plans
Prevention of Releases

QUESTIONS

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PA DEP STORMWATER MANAGEMENT

- Stormwater Permits Required for Construction Activities

- Stormwater Permits Required for Industrial Operations

Stormwater Permits Required for Construction Activities

- PAG-01 Small Construction Projects
  - Small defined by an area of disturbance greater than 1 acre and less than 5 acres (must include any portion, part, or any stage of a larger common plan in calculating the area of disturbance)
  - Stormwater does not discharge to HQ or EV waters or wetlands
  - PNDI with “no impacts”
  - No spills or releases through Due Diligence or testing

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Stormwater Permits Required for Construction Activities

- PAG-01 Small Construction Projects
  - Must include BMPs
  - E&S Controls during Construction
  - Post Construction Stormwater Management Plan with BMPs
  - Cannot Use REGULATED FILL

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Stormwater Permits Required for Construction Activities

- PAG-02 Construction Projects
  - Defined by an area of disturbance greater than 5 acres (must include any portion, part, or any stage of a larger common plan in calculating the area of disturbance) Or for a Small Construction which does not qualify for PAG-01.
  - Stormwater does not discharge to HQ or EV waters or wetlands

Stormwater Permits Required for Construction Activities

- PAG-02 Construction Projects
  - No discharge of hazardous pollutants
  - Cannot cause adverse environmental impact
  - Not at a coal mining or noncoal mining site
  - Cannot impact Endangered or Threated Species or habitat
  - No discharges of wastewater

Stormwater Permits Required for Construction Activities

- PAG-02 Construction Projects
  - Inspection Requirements weekly and after storms
  - Non-compliance self reporting required
  - Must include BMPs
  - E&S Controls during Construction
  - Post Construction Stormwater Management Plan with BMPs
  - Preparedness, Prevention, and Contingency PPC Plan

Stormwater Permits Required for Construction Activities

- Individual Permit for Construction
  - Defined as any construction project which does not qualify for PAG-01 or PAG-02.
  - Most Common related to Discharge to HQ or EV Waters and wetlands.

Stormwater Permits Required for Construction Activities

- PAG-03 Discharges of Stormwater from Industrial Activities
- Post Construction at Facilities; Many Post Construction Stormwater Management Plans developed as part of Construction Permitting are PAG-03 Permits.

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Stormwater Permits Required for Construction Activities

- PAG-03 Discharges of Stormwater from Industrial Activities
  - Industry Specific
  - Asphalt Plants Covered Under Appendix M

- PAG-03 Limitations (similar to construction permit limitations, may require an Individual Permit)

Stormwater Permits Required for Construction Activities

- NOT for Facilities where Stormwater is Treated Prior to Discharge
- NOT for Facilities which Discharge Pollutants
- NOT for Facilities which Discharge to High Quality or Exceptional Value Waters of the Commonwealth
- NOT for Combined Discharges (Process Water, Sanitary, etc.)

PAG – 03 STORMWATER PERMIT FOR ASPHALT PLANTS

- NOT for Facilities where Threatened or Endangered Species May be Present
- NOT for Facilities Discharging to Impaired Waters (Total Maximum Daily Load)
- Can be Other Specific Limitations Based on Constituents of Discharge – Detail Discharge Constituents in Application

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PAG – 03 STORMWATER PERMIT FOR ASPHALT PLANTS

PAG-03 BEST MANAGEMENT PRACTICES

To: Prevent Floating Solids, Scum, Sheen or Deposits in Receiving Water

To: Prevent Foam or Substances that Change Color, Taste, Odor, or Turbidity

To: Prevent Oil and Grease that Forms a Sheen

To: Prevent Release of Substances in Amounts that are Harmful to Human, Animal, Plant or Aquatic Life

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PAG – 03 STORMWATER PERMIT FOR ASPHALT PLANTS

PAG-03 BEST MANAGEMENT PRACTICES – ALL FACILITIES

- Good Housekeeping Practices
- Erosion and Sediment Controls
- Spill Prevention and Response
- Pollution Prevention Contingency Plans
- Routine Inspections
- Implement Monitoring Program

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PAG-03 BEST MANAGEMENT PRACTICES – APPENDIX M ASPHALT PLANTS

A. Provide for secondary containment around asphalt and petroleum product tanks; install leak detection and high level overflow devices.

B. Practice good housekeeping by periodically removing dust and spilled materials from throughout the site.

C. Divert stormwater run-on from aggregate storage areas and design piles to minimize erosion and control runoff.

D. Only perform vehicle washing in dedicated areas; collect washwater from storm drainage separately.

E. Complete truck wheel washing if necessary to avoid off-site material tracking.

F. Utilize dust control agents.

G. Use biodegradable truck release materials.

H. Wash trucks using biodegradable washing materials or wash trucks indoors.

I. Use silt fences or rock filters around piles or sediment basins to control turbidity in runoff.

J. Ensure that vegetated drainage ditches and swales are properly seeded and any accumulated materials in them have been removed at least annually.

PAG-03 BEST MANAGEMENT PRACTICES – APPENDIX M ASPHALT PLANTS

Sweeping Roads to Remove Dust

Wheel Washing to Remove Sediment

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PAG-03 BEST MANAGEMENT PRACTICES – APPENDIX M ASPHALT PLANTS

Asphalt Berms or Diversions

We Have Plenty of Asphalt at Sites
and It can be a Simple BMP

Clean Inlets as a BMP

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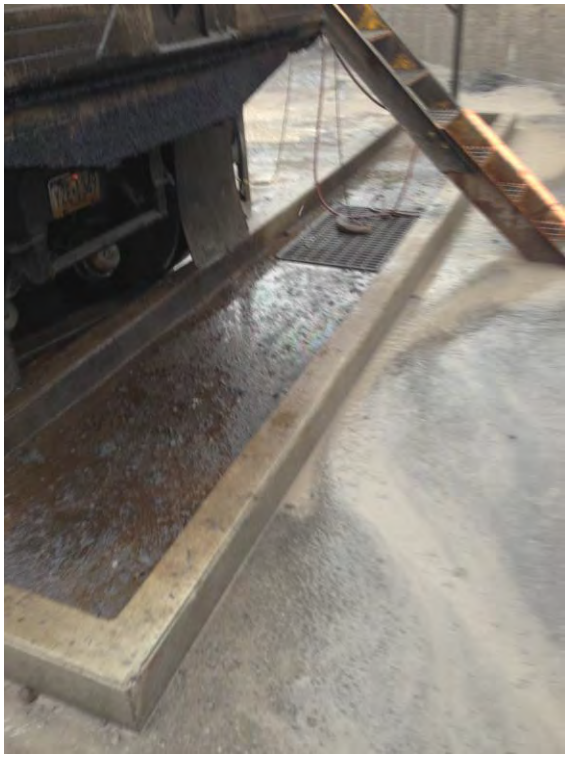
Biodegradable Truck Bed Release Agents

And Collection Systems



Rock Filters and Sediment Controls – Maintenance After Storms

York County Conservation District

PAG – 03 STORMWATER MONITORING REQUIREMENTS FOR ASPHALT PLANTS

The permittee must monitor and report analytical results for the parameters listed below on Discharge Monitoring Reports (DMRs) for representative outfalls, subject to footnotes provided. The benchmark values listed below are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two consecutive monitoring periods, the permittee shall submit a corrective action plan within 90 days of the end of the monitoring period triggering the plan.

Parameter	Monitoring Requirements [1]		Benchmark Values
	Minimum Measurement Frequency [2]	Sample Type	
pH (S.U.)	1 / 6 months	Grab	XXX
Oil and Grease (mg/L)	1 / 6 months	Grab	30
Total Suspended Solids (TSS) (mg/L)	1 / 6 months	Grab	100

Footnotes

(1) In accordance with Part C V.B, the permittee shall conduct additional monitoring if specified by DEP in the letter authorizing permit coverage or other correspondence.

(2) This is the minimum number of sampling events required. Permittees are encouraged to perform more than the minimum number of sampling events.

PAG – 03 STORMWATER MONITORING REQUIREMENTS FOR ASPHALT PLANTS

Benchmark Value means the concentration of a pollutant that serves as the threshold for the determination of whether existing site best management practices are effective in controlling stormwater pollution. Benchmark values are not effluent limitations. Two consecutive monitoring period exceedances of benchmark values triggers the requirement to develop and submit a corrective action plan.

Corrective Action Plan means a document or correspondence submitted to DEP that identifies additional pollutant control measures or BMPs that will be implemented by the permittee in order to reduce the concentration of pollutants in stormwater discharges to levels at or below benchmark values specified in sector-specific appendices of the PAG-03 General Permit, along with an implementation schedule.

PAG – 03 STORMWATER MONITORING REQUIREMENTS FOR ASPHALT PLANTS

- PA DEP eDMR (Electronic Discharge Monitoring Report) - Monthly
- Submit Reports Even if NO DISCHARGES
- Keep Inspection Reports and Logs Available at the Facility
- Annual Report

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PA DEP PROPOSED CHANGES TO BE ON THE LOOKOUT FOR LATE 2022

- Addition of New Parameters to Monitor
  - Total Nitrogen, Total Phosphorus
  - pH

- Total Suspended Solids Benchmark Increase from 100 to 150 mg/L

- After 4 consecutive exceedances of benchmark values, DEP is going to require a Corrective Action Plan with a BMP Checklist
  - The Checklist evaluates various BMPs, the permittee must determine which are feasible and which are not.
  - All Feasible BMPs must be implemented.

PA DEP PROPOSED CHANGES TO BE ON THE LOOKOUT FOR LATE 2022

3800-PM-BCW0083I 1/2022
Stormwater BMPs Checklist

APPENDIX M

ASPHALT PAVING, ROOFING MATERIALS AND LUBRICANTS

Best Management Practices	Reason Why Infeasible or Not Implemented
☐ 1. Ensure that all BMPs contained in Part C of the General Permit and all applicable appendices have been implemented are in good working order.	
☐ 2. Confine storage, loading/unloading, and transfer activities to designated, labeled areas outside of drainage paths and away from surface waters and high traffic areas.	
☐ 3. Provide concrete or otherwise impervious pads and adequate secondary containment for all storage of drums, containers, materials, fuel tanks, etc. and provide permanent cover or locate pads indoors.	
☐ 4. Prevent run-on and divert stormwater around fueling areas using vegetated swales and/or berms.	
☐ 5. Use curbing, dikes, and gutters to contain and collect spills.	
☐ 6. Divert stormwater around storage areas using vegetated swales and/or berms.	
☐ 7. Implement an increased regular sweeping, maintenance, and inspection schedule for all areas, containers, and BMPs.	

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PAG – 03 STORMWATER MONITORING REQUIREMENTS FOR ASPHALT PLANTS

- PAG-03 Take-A-Ways
- Goal is to Prevent Impacts to Discharged Stormwater
- Review the Permit and Make Sure You Follow BMPs

- Sampling Per Appendix M
- Inspections and Records
- Reporting (Monthly, Annual, and Specific Occurrences)

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PAG – 03 STORMWATER PERMIT FOR ASPHALT PLANTS

QUESTIONS

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PA DEP MANAGEMENT OF FILL UPDATES

- November 2021 – PA DEP Publishes Most Recent Statewide Health Standards
- Statewide Health Standards are Risked Based and Reviewed Every 3 Years
- These Current Statewide Health Standards now Used for Clean Fill Determinations
- Examples:
  - Arsenic unchanged 12 mg/kg
  - Benzo(a)pyrene 4.2 mg/kg (increased from 0.58 mg/kg)
  - Vanadium 15 mg/kg (decreased from 1,500 mg/kg)

PA DEP MANAGEMENT OF FILL VANADIUM

- February 26,2022 DEP Issues Background Demonstration and Equivalent Site Evaluation for Naturally Occurring Vanadium
- Representative Background Condition (RBC) for PA, NJ, NY
- Need Due Diligence to Document No Vanadium Releases
- If RBC is met and No Releases, then Fill with Vanadium Detected ABOVE the Clean Fill Standard Qualifies as Clean Fill

PA DEP MANAGEMENT OF FILL VANADIUM

- PA DEP Clean Fill Limit for Vanadium is 15 mg/kg (as of 11/21).
- Vanadium 5th most abundant metal in earth's crust average of 130 mg/kg
- USGS Completed Testing in PA, NJ, NY which is basis for RBCs
  - PA – 129 mg/kg
  - NJ – 136 mg/kg
  - NY – 118 mg/kg
- No release of Vanadium KEY to Using the RBCs

Questions?

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