FACT SHEET
REISSUANCE OF A GENERAL VPDES PERMIT
FOR INDUSTRIAL ACTIVITY STORMWATER DISCHARGES

The Virginia State Water Control Board has under consideration the reissuance of a general VPDES permit for point source discharges of stormwater associated with industrial activity to surface waters.

Permit Number:	VAR05
Name of Permittee:	Any owner in the Commonwealth of Virginia agreeing to be regulated under the terms of this general permit.
Facility Location:	Commonwealth of Virginia
Receiving Waters:	Surface waters within the boundaries of the Commonwealth of Virginia, except waters specifically named in Board regulations or policies which prohibit such discharges.

On the basis of preliminary review and application of lawful standards and regulations, the State Water Control Board proposes to reissue the general permit subject to certain conditions and has prepared a draft permit. The category of discharges to be included involves stormwater discharges from subcategories of industrial facilities with the same or similar types of operations, and discharging the same or similar types of wastes. The Board has determined that this category of discharges is appropriately controlled under a general permit. The draft general permit requires that all covered facilities within a particular subcategory meet standardized permit conditions and monitoring requirements, and provides dates for submitting monitoring data. This permit will maintain the water quality standards adopted by the Board. This general permit will replace the general permit VAR05 which expires on June 30, 2024. Owners covered under the expiring general permit who wish to continue to discharge under a general permit must register for coverage under the new permit.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting:

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Administrative

The general permit will have a fixed term of five (5) years effective, upon Board approval, July 1, 2024. Every authorization to discharge under this general permit will expire at the same time and all authorizations to discharge will be renewed on the same date. Discharges will be covered under the general permit upon approval of the Registration Statement and delivery of a copy of the general permit to the applicant.

This general permit does not apply to any new or increased discharge that will result in significant effects to the receiving waters. That determination is made in accordance with the State Water Control Board's Anti-degradation Policy contained in the Virginia Water Quality Standards, 9VAC25-260-30. Anti-backsliding will also be considered prior to granting coverage under this general permit to operations currently discharging stormwater under another VPDES permit.

If a discharge appears to qualify for this general permit, the operator must submit a general permit Registration Statement to apply for general permit coverage. The Department will either send a copy of the general permit to those applicants that qualify or send a copy of the VPDES individual permit application to those that do not qualify.

Activities Covered Under This General Permit

This permit covers point source discharges of stormwater associated with industrial activity to surface waters of the Commonwealth, including discharges through municipal or non-municipal separate storm sewer systems. This permit also covers stormwater discharges designated by the Board for permitting under the provisions of 9VAC25-31-120 A 1 c, or under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES Permit Regulation.

To be eligible to discharge under the permit, an owner must (1) have a stormwater discharge associated with industrial activity from the facility's primary industrial activity, provided the primary industrial activity is included in Table 1 below, or (2) be notified that the stormwater discharges from the facility have been designated by the Board for permitting.

TABLE 1: SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT.

SIC Code or Activity Code	Activity Represented
Sector A: Timber Products	
2411	Log Storage and Handling (wet deck storage areas are only authorized if no chemical additives are used in the spray water or applied to the logs).
2421	General Sawmills and Planning Mills.
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.
2441, 2448, 2449	Wood Containers.
2451, 2452	Wood Buildings and Mobile Homes.
2491	Wood Preserving.
2493	Reconstituted Wood Products.
2499	Wood Products, Not Elsewhere Classified (includes SIC Code 24991303 - Wood, Mulch and Bark facilities).
Sector B: Paper and Allied Products	
2631	Paperboard Mills.
Sector C: Chemical and Allied Products	
2812-2819	Industrial Inorganic Chemicals.
2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Synthetic Fibers except Glass.

2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations.
2873-2879	Agricultural Chemicals (includes SIC Code 2875 - Composting facilities).
Sector D: Asphalt Paving and Roofing Materials and Lubricants	
2951, 2952	Asphalt Paving and Roofing Materials.
2992, 2999	Miscellaneous Products of Petroleum and Coal.
Sector E: Glass Clay, Cement, Concrete, and Gypsum Products	
3251-3259	Structural Clay Products.
3261-3269	Pottery and Related Products.
3274, 3275	Concrete, Gypsum and Plaster Products, except: Concrete Block and Brick; Concrete Products, except Block and Brick; and Ready-Mixed Concrete Facilities (SIC 3271-3273) (Concrete Block and Brick; Concrete Products, except Block and Brick; and Ready-Mixed Concrete Facilities (SIC 3271-3273) are covered under the Concrete Products General Permit (VAG11)).
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).
Sector G: Metal Mining (Ore Mining and Dressing)	
1011	Iron Ores.
1021	Copper Ores.
1031	Lead and Zinc Ores.
1041, 1044	Gold and Silver Ores.
1061	Ferroalloy Ores, Except Vanadium.
1081	Metal Mining Services.
1094, 1099	Miscellaneous Metal Ores.
Sector H: Coal Mines and Coal Mining Related Facilities	
1221-1241	Coal Mines and Coal Mining-Related Facilities.
(Sector J: Mineral Mining and Dressing Facilities (SIC 1411-1499) are not authorized under this permit – see the Non-Metallic Mineral Mining General Permit (VAG84) for permit coverage.)	
Sector K: Hazardous Waste Treatment, Storage, or Disposal Facilities	
HZ	Hazardous Waste Treatment Storage or Disposal.
Sector L: Landfills and Land Application Sites	
LF	Landfills, Land Application Sites, and Open Dumps.
Sector M: Automobile Salvage Yards	
5015	Automobile Salvage Yards.
Sector N: Scrap Recycling Facilities	

5093	Scrap Recycling Facilities.
4499 (limited to list)	Dismantling Ships, Marine Salvaging, and Marine Wrecking - Ships for Scrap
Sector O: Steam Electric Generating Facilities	
SE	Steam Electric Generating Facilities.
Sector Q: Water Transportation and Ship and Boat Building or Repairing Yards	
4412-4499 (except 4499 facilities as specified in Sector N)	Water Transportation.
3731, 3732	Ship and Boat Building or Repairing Yards.
Sector U: Food and Kindred Products	
2021-2026	Dairy Products.
2041-2048	Grain Mill Products.
2074-2079	Fats and Oils.
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 Plastics Hose and Belting.
3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified.
Sector AA: Fabricated Metal Products	
3411–3471, 3482-3499	Fabricated Metal Products, except Machinery and Transportation Equipment.
3479	Fabricated Metal Coating and Engraving
3911–3915	Jewelry, Silverware, and Plated Ware
Sector AB: Transportation Equipment, Industrial or Commercial Machinery	
3511-3599 (except 3571-3579)	Industrial and Commercial Machinery (except Computer and Office Equipment).
Sector AD: Non-classified Facilities/Stormwater Discharges Designated by the Department as Requiring Permits	
N/A	Stormwater Discharges Designated by the Department for Permitting under the Provisions of 9VAC25-31-120 A 1 c, or Under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES Permit Regulation. Facilities may not elect to be covered under Sector AD. Only the department may assign a facility to Sector AD.
Sector AE: Facilities with No Analytical Benchmark Monitoring Requirements	
2611	Pulp Mills.
2621	Paper Mills.
2652-2657	Paperboard Containers and Boxes.

2671-2679	Converted Paper and Paperboard Products, except Containers and Boxes.
2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; In Vitro and In Vivo Diagnostic Substances; 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)	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.
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 Non-Metallic Mineral Products.
3331-3339	Primary Smelting and Refining of Nonferrous Metals.
3398, 3399	Miscellaneous Primary Metal Products.
3341	Secondary Smelting and Refining of Nonferrous Metals.
1311	Crude Petroleum and Natural Gas.
1321	Natural Gas Liquids.
1381-1389	Oil and Gas Field Services.
2911	Petroleum Refineries.
4512-4581	Air Transportation Facilities.
TW	Treatment Works.
2011-2015	Meat 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.
2211-2299	Textile Mill Products.
2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials.
3131-3199	Leather and Leather Products, except Leather Tanning and Finishing.
2434	Wood Kitchen Cabinets.
2511-2599	Furniture and Fixtures.
2711-2796	Printing, Publishing, and Allied Industries.
3081-3089	Miscellaneous Plastics Products.
3931	Musical Instruments.
3942-3949	Dolls, Toys, Games and Sporting and Athletic Goods.
3951-3955 (except 3952)	Pens, Pencils, and Other Artists' Materials.

3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal.
3991-3999	Miscellaneous Manufacturing Industries.
3111	Leather Tanning, Currying and Finishing.
3711-3799 (except 3731, 3732 - see Sector Q)	Transportation Equipment (except Ship and Boat Building and Repairing).
3571-3579	Computer and Office Equipment.
3612-3699	Electronic and Other Electrical Equipment and Components, except Computer Equipment.
3812-3873	Measuring, Analyzing and Controlling Instruments; Photographic, Medical and Optical Goods; Watches and Clocks.
Sector AF: Facilities Limited to Total Suspended Solids Benchmark Monitoring Requirements	
4011, 4013	Railroad Transportation.
4111-4173	Local and Highway Passenger Transportation.
4212-4231	Motor Freight Transportation and Warehousing.
4311	United States Postal Service.
5171	Petroleum Bulk Stations and Terminals.

Owners/operators of facilities currently covered under the 2019 Industrial Stormwater General Permit (ISWGP) who wish to continue coverage under this general permit must submit a new Registration Statement to the Department.

This permit covers stormwater discharges from a wide variety of industrial activities. Because the conditions which affect the presence of pollutants in stormwater discharges vary among industries, the permit contains both general SWPPP requirements that apply to all facilities, and industry-specific sections (sector specific requirements) that describe any additional SWPPP requirements, applicable numeric effluent limitation requirements, and any benchmark monitoring requirements for that industrial sector.

The volume and quality of stormwater discharges associated with industrial activity will depend on a number of factors, including the industrial activities occurring at the facility, the nature of precipitation, and the degree of surface imperviousness. Pollutants in stormwater discharges from industrial plants may be reduced using the following methods: eliminating pollution sources, implementing Best Management Practices (BMPs) to prevent pollution, using traditional stormwater management practices, and providing end-of-pipe treatment.

This VPDES general permit follows the basic framework of the U.S. EPA Multi-Sector General Permit (MSGP). The reader is referred to the most recent 2021 MSGP and Fact Sheet for details on the profiles of the various industrial sectors, reviews of pollutants found in stormwater, selection of analytical monitoring parameters, estimated costs for pollution prevention measures, and stormwater pollution control options for each industry type (https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp).

In the case where a facility has multiple industrial activities occurring on-site which are described by any of the subsectors in the general permit, those industrial activities are considered co-located industrial activities. Stormwater discharges from co-located industrial activities are authorized by this permit, provided that the permittee complies with any and all additional pollution prevention plan and monitoring requirements applicable to the co-located industrial activity. Permittees are required to determine which additional pollution prevention plan and monitoring requirements are applicable to the co-located industrial activity by examining the narrative descriptions of each sector specific coverage section of the permit (Discharges Covered Under This Section).

Limitations on Coverage

Because of the broad scope of this permit, most industrial activities regulated under the VPDES stormwater program are eligible to be covered under the permit. There are, however, several types of stormwater discharges which are *not* covered under this permit. Discharges into a waterbody where a discharge is prohibited by another regulation of the State Water Control Board are not authorized by this general permit. If an owner has been required to obtain an individual VPDES permit for their stormwater discharges pursuant to 9VAC25-31-170 B 3 (VPDES Permit Regulation), they are not authorized for coverage under this permit. Discharges from VPDES permitted construction activities are also not eligible for coverage under this permit.

Other discharges of stormwater that are not authorized under the general permit are:

1. Discharges that are not within the industrial sectors identified in Table 1 (unless they are designated by the Department for coverage under sector AD).
2. Discharges that violate or would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30.
3. Discharges that are not consistent with the assumptions and requirements of an approved TMDL.
4. Discharges subject to stormwater effluent limitation guidelines not described in the permit.

Stormwater discharges from non-metallic mineral mining facilities (SIC Major Group 14), and concrete block and brick, concrete products (except block and brick), and ready-mixed concrete facilities (SIC codes 3271-3273) are not covered by this permit. Facilities in these SIC categories should seek coverage under separate VPDES general permits (VAG84 and VAG11) developed specifically for these industries.

Authorized non-stormwater discharges. The following non-stormwater discharges are authorized by this permit:

1. Discharges from emergency firefighting activities or firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia.
2. Fire hydrant flushing, managed in a manner to avoid an instream impact.
3. Potable water, including water line flushing, managed in a manner to avoid an instream impact.
4. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids.
5. Irrigation drainage.
6. Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling.
7. Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and wash water is filtered, settled, or similarly treated prior to discharge.
8. Pavement wash waters provided no soaps, solvents, detergents or hazardous cleaning products are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled or leaked material is removed prior to washing), and the wash water is filtered, settled, or similarly treated prior to discharge;
9. Uncontaminated groundwater or spring water.
10. Foundation or footing drains where flows are not contaminated with process materials.
11. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

All other non-stormwater discharges are not authorized and shall either be eliminated or covered under a separate VPDES permit.

Summary of Substantive Changes from the 2019 Industrial Stormwater General Permit

This general permit replaces the 2019 ISWGP which was issued for a five-year term on July 1, 2019. Following is a list of substantive changes included in the permit as compared to the 2019 permit:

Part I - Effluent Limitations, Monitoring Requirements and Special Conditions

- Quarterly visual monitoring: Removed requirement to sign documentation in accordance with Part II K given that visual monitoring documentation is not submitted to the department.
- Benchmark Monitoring: Sector-specific benchmark monitoring parameters listed in Table 70-1 were updated in accordance with EPA's 2021 MSGP, the Virginia Water Quality Standards (WQS), and the recommendations of the technical advisory committee (TAC).
- Effluent Limitation Guidelines: Table 70-2 (Stormwater-Specific Effluent Limitation Guidelines) was updated to clarify that facilities subject to 40 CFR Part 449 (discharges from primary airport deicing operations) may be covered under Sector AD of this permit.
- Facilities discharging to an impaired water with an approved TMDL wasteload allocation: Added language to allow sampling data collected during the 2019 permit term to be used to satisfy all or part of any monitoring required by this section. Added language requiring facilities exceeding the TMDL wasteload allocation to prepare and submit a pollutant minimization plan (PMP) upon notification from the department. The contents of a PMP are included in the new language.
- Facilities discharging to an impaired water without an approved TMDL wasteload allocation: Clarified that monitoring in accordance with this section is to be completed at least once every six months unless another sampling frequency is determined by the department for polychlorinated biphenyls (PCBs). PCB monitoring is expensive, so a reduced frequency (e.g., annual) may be more appropriate for initial impaired water monitoring.
- Monitoring Instructions: Replaced references to "measurable storm event" with "storm event discharge". Revised section to remove the requirement to report the duration (in hours) of storm events sampled. The language now requires the permittee to identify the date of the storm events sampled, total rainfall (in inches), and the interval between the storm event sampled and the end of the previous storm event discharge. Added requirement to submit documentation via e-DMR explaining a facility's inability to obtain a sample, of no rain event, or deviations from the 72-hour storm interval.
- Corrective actions: Section consolidated to remove repetition. Added requirement that exceedance reports submitted to the department must be signed in accordance with Part II K.
- Authorized nonstormwater discharges: Added firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia. Clarified that routine external building washdown must be managed in a manner to avoid instream impact.
- Chesapeake Bay TMDL conditions: The entirety of the Chesapeake Bay TMDL conditions are moved to Part V (see below).

Part II - Conditions Applicable to All VPDES Permits

- Reports of noncompliance: Updated link to the online Pollution Response Preparedness (PReP) portal. Clarified that the online portal shall be used for reports outside of normal working hours.

Part III - Stormwater Pollution Prevention Plan

- Stormwater controls: Added airport deicing operations condition to clarify that deicing operations are covered under this permit and to provide some control measure options for consideration. The new condition is based on language previously used for Sector S.

Part IV – Sector Specific Permit Requirements

- Benchmark Monitoring: Sector-specific benchmark monitoring parameters were updated in accordance with EPA's 2021 MSGP and the Virginia Water Quality Standards (WQS).

Part V – Chesapeake Bay Total Maximum Daily Load Compliance

- Total Suspended Solids: The reduction requirements for TSS under the Chesapeake Bay TMDL Compliance section have been removed. This is in accordance with Virginia's Final Phase III Watershed Implementation Plan (WIP) based on the recommendations of the 2019 Chesapeake Bay Program Principals' Staff Committee, discussed later in this fact sheet. Nutrient (nitrogen and phosphorus) reduction requirements remain in place and BMPs installed for the purposes of meeting these requirements will continue to provide sediment reductions. Further, TSS benchmarks and numeric effluent limitations are included on a sector-specific basis under Part IV of this permit.
- Chesapeake Bay TMDL Compliance: Requirements are now separated into three distinct categories depending on the status of a facility's demonstration of compliance:

  1. Facilities that obtained coverage under the 2019 general permit that demonstrated compliance with the Chesapeake Bay TMDL loading rates.

     a. Documentation of the demonstration of compliance is to be maintained with the stormwater pollution prevention plan (SWPPP) and permittees are to continue to implement any BMPs developed as part of the demonstration.

  2. Facilities that obtained coverage under the 2019 general permit that did not demonstrate compliance with the Chesapeake Bay TMDL loading rates.

     a. If the required sampling was not completed under the 2019 permit, additional samples are to be collected during the first four quarters of permit coverage.

     b. If stormwater load calculations and a Chesapeake Bay TMDL action plan (if required) were not submitted under the 2019 permit, they are to be submitted no later than 60 days following permit coverage (if sampling was already completed) or 60 days following the completion of the fourth sample collected during the first four quarters of permit coverage.

     c. Reductions, if applicable, are to be achieved by December 31, 2025, and documentation that the reductions have been achieved is to be submitted to the department no later than February 1, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates is to be maintained with the SWPPP.

     Facilities registered under the 2019 industrial stormwater general permit ***after*** June 30, 2022, are treated the same as those that obtain initial coverage under the 2024 permit for the purposes of this section.

  3. Facilities that obtain initial coverage under the 2024 general permit (but are not newly constructed facilities).

     a. Samples are to be collected during the first four quarters of permit coverage. Stormwater load calculations and a Chesapeake Bay TMDL action plan (if required) are to be submitted no later than 60 days following the completion of the fourth sample. Reductions, if applicable, are to be achieved two years following the end of the fourth quarterly monitoring period and documentation that the reductions have been achieved shall be submitted to the department no later than the 10th of the month directly following the two year period. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

- Reporting Monitoring Results: The Chesapeake Bay TMDL monitoring frequency is changed from semi-annual to quarterly in order to help facilitate meeting the December 31, 2025 deadline of the Chesapeake Bay TMDL.
- Calculation of facility loads: Added language allowing for the proposal of alternative stormwater load calculations on a case-by-case basis to address facilities with outfalls that rarely discharge.

Part I.A - Permit Effluent Limitations and Monitoring Requirements

1. Discharge Monitoring Requirements. The permit contains four general types of monitoring requirements: (a) quarterly visual monitoring; (b) benchmark monitoring for specific industrial activities; (c) compliance monitoring for facilities subject to numerical effluent limitations, and (d) impaired waters monitoring, both for those with and without an approved TMDL. These are minimum monitoring requirements and if a permittee so chooses, additional sampling may be conducted to acquire more data to improve the statistical validity of the results. Through increased analytical or visual monitoring the permittee may be able to better ascertain the effectiveness of their SWPPP.

   a. Quarterly visual examination of stormwater quality.

   Applicability: All facilities

   Frequency: Quarterly each year of general permit coverage (January-March, April-June, July-September, October-December)

   Due Date: By the end of the applicable quarter (March 31, June 30, September 30, and December 31)

   Where to Submit: Report is kept with facility's SWPPP (not submitted to DEQ)

   Facilities covered under this permit are required to conduct a quarterly visual examination of stormwater discharges associated with industrial activity from each outfall, except discharges exempted under the representative discharge provision. These visual examinations will assist with the evaluation of the SWPPP, and provides a simple, low cost means of assessing the quality of stormwater discharge with immediate feedback. The visual examination of stormwater outfalls must include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, other obvious indicators of stormwater pollution, and identification of probably sources of any observed stormwater contamination.

   No analytical tests are required to be performed on these visual examination samples.

   The visual examination of the sample must be made in well lit areas during normal working hours, where practicable, and when considerations for safety and feasibility allow. The visual examination is not required if there is insufficient rainfall or snow-melt to runoff, or if hazardous conditions prevent sampling during the monitoring period. Grab samples for the examination shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 3 hours) of when the runoff begins discharging. Reports of the visual examination include: the examination date and time, examination personnel, visual quality of the stormwater discharge, and probable sources of any observed stormwater contamination. The visual examination reports must be maintained on site with the SWPPP.

   b. Benchmark monitoring requirements.

   Applicability: All facilities except those covered under Sector AE (see Table 2). Sector AE does not require benchmark monitoring.

   Frequency: Every six months each year of general permit coverage (January-June and July-December). The semi-annual monitoring frequency, used since the original 2004 general permit, remains sufficient given the specific monitoring requirements (within 30 minutes of storm event, 72-hours since the last storm event) which are supported by quarterly visual monitoring and site inspections.

   Due Date: July 10 for the January-June period and January 10 for the July-December period

   Where to Submit: Submit results electronically through the eDMR system

   Certain industrial sectors are required to conduct monitoring of their stormwater discharges associated with industrial activity for pollutants of concern. In some cases, the monitoring is applicable only to a subsector rather than the entire industrial sector. Benchmark monitoring requirements involve laboratory chemical analyses of samples collected by the permittee. Table 2 lists the industrial sectors, or subsectors, required to perform benchmark monitoring and the associated parameters.

TABLE 2. BENCHMARK MONITORING REQUIREMENTS.

Industry Sector [1]	SIC Code or Activity Code	Benchmark Monitoring Parameters
A	2421	TSS.
	2491	Arsenic, Chromium, Copper.
	2411	TSS.
	2426	TSS.
	2499 (24991303)	COD, TSS.
	2499 (Mulch Dyeing)	BOD, TSS, COD, Aluminum, Arsenic, Cadmium, Chromium, Copper, Selenium, Silver, Zinc, Total N, Total P.
B	2631	BOD.
C	2812-2819	Aluminum, Total N.
	2821-2824	Zinc.
	2841-2844	Total N, Zinc.
	2873-2879	Total N, Zinc, Total P.
	2875 (Composting Facilities)	TSS, BOD, COD, Ammonia, Total N, Total P.
D	2951, 2952	TSS.
E	3251-3259, 3261-3269	Aluminum.
	3274, 3275	TSS, pH.
F	3312-3317	Aluminum, Zinc.
	3321-3325	Aluminum, TSS, Copper, Zinc.
	3351-3357	Copper, Zinc.
	3363-3369	Copper, Zinc.
G [2]	1021	TSS
H	1221-1241	TSS, Aluminum.
K	HZ (Hazardous Waste Treatment, Storage, or Disposal)	TKN, TSS, TOC, Arsenic, Cadmium, Cyanide, Lead, Mercury, Selenium, Silver.
L	LF (Landfills, Land Application Sites, and Open Dumps)	TSS.
M	5015	TSS, Aluminum, Lead.
N	5093	Aluminum, Cadmium, Chromium, Copper, Lead, Zinc, TSS.
	4499	Aluminum, Cadmium, Chromium, Copper, Lead, Zinc, TSS.
O	SE (Steam Electric Generating Facilities)	Facilities in Sector O are not subject to benchmark requirements.
Q	4412-4499 (except 4499 facilities as specified in Sector N)	TSS, Copper, Zinc.
	3731, 3732	TSS, Copper, Zinc.
U	2021-2026	BOD, TSS.
	2041-2048	TSS, TKN.

	2074-2079	BOD, Total N, TSS.
Y	3011-3069	Zinc.
AA	3411-3471, 3482-3499, 3911-3915	Aluminum, Copper, Zinc.
	3479	Zinc.
AB	3511-3599 (except 3571-3579)	TSS, TPH, Copper, Zinc.
AD	Nonclassified Facilities/Stormwater Discharges Designated By the Department As Requiring Permits	As determined by the director.
AE	2611, 2621, 2652-2657, 2671-2679, 2833-2836, 2851, 2861 2869, 2891 2899, 39523211, 3221, 3229, 3231, 3241, 3281, 3291 3299, 3331 3339, 3398, 3399, 3341, 1311, 1321, 1381 1389, 2911, 4512-4581, (TW) Treatment Works, 2011 2015, 2032 2038, 2051 2053, 2061 2068, 2082-2087, 2091 2099, 2111 2141, 2211 2299, 2311 2399, 3131 3199, 2434, 2511 2599, 2711 2796, 3081 3089, 3931, 3942 3949, 3951 3955 (except 3952), 3961, 3965, 3991 3999, 3111, 3711 3799 (except 3731, 3732 see Sector Q), 3571 3579, 3612 3699, 3812 3873	Facilities in Sector AE are not subject to benchmark monitoring requirements.
AF	4011, 4013, 4111 4173, 4212 4231, 4311, 5171	TSS.

[1] Table does not include parameters for compliance monitoring under effluent limitations guidelines.
[2] See Sector G (Part IV G) for additional monitoring discharges from waste rock and overburden piles from active ore mining or dressing facilities, inactive ore mining or dressing facilities, and sites undergoing reclamation.

Industries may reduce the level of pollutants in stormwater runoff from their sites through the development and proper implementation of a SWPPP. Benchmark monitoring is a means by which to measure the concentration of a pollutant in a stormwater discharge. Because these pollutants have been reported at or above benchmark levels, DEQ is requiring monitoring after the SWPPP has been implemented to assess the effectiveness of the SWPPP and to help ensure that a reduction of pollutants is realized. Analytical results are quantitative and therefore can be used to compare results from discharge to discharge and to quantify the improvement in stormwater quality attributable to the SWPPP, or to identify a pollutant that is not being successfully controlled by the plan. The results of the benchmark monitoring are not intended to be used to evaluate actual or potential exceedances of instream water quality criteria.

Development of Benchmark Values

To determine the industry sectors and subsectors that would be subject to benchmark monitoring requirements contained in the general permit, DEQ initially relied primarily upon the fact sheet prepared for the 1995 EPA MSGP and, in the years following, has continued to evaluate benchmarks in accordance with updates to the EPA MSGP, as deemed appropriate.

In developing the 1995 MSGP, EPA reviewed the data submitted in accordance with the 1990 group stormwater permit application process. EPA established benchmark concentrations for the pollutant parameters on which monitoring results had been received. EPA continued those benchmark requirements for their 2000 MSGP, but for the 2008 MSGP, EPA undertook an analysis of the monitoring requirements of the 2000 MSGP that included: how effective existing controls on these discharges have been based on the history of discharge monitoring data; Toxics Release Inventory (TRI) data; and results and conclusions from the University of California Los Angeles Final Report, *Industrial Stormwater Monitoring Program Existing Statewide Permit Utility and Proposed Modifications*. One of the primary purposes of these analyses was to determine if elimination of, or modification or addition to, benchmark monitoring requirements was warranted. This information helped EPA identify potential pollutants that may be present in the stormwater discharges.

The resulting benchmarks are the pollutant concentrations above which EPA views as levels of concern. The level of concern is a concentration at which a stormwater discharge could potentially impair or contribute to impairing water quality or affect human health from ingestion of water or fish. The benchmarks are also viewed by EPA as a level below which there is little potential for water quality concern.

The benchmark concentrations ***are not effluent limitations*** and should not be interpreted as such. These values are merely levels which EPA and DEQ have used to determine if a stormwater discharge from any given facility merits further monitoring to ensure that the facility has been successful in implementing a SWPPP. As such, these levels represent a target concentration for a facility to achieve through implementation of pollution prevention measures at the facility.

The reader is referred to the fact sheets of each iteration of the EPA MSGP and previous fact sheets of this general permit for more information on the periodic reevaluation of benchmarks. Changes for the 2024 general permit are discussed following Table 3 below.

Table 3 lists the parameter benchmark values and sources for the 2024 general permit. These values are based on an evaluation of the EPA fact sheets for the 1995, 2000, 2008, 2015 and 2021 MSGPs, the sector-specific analytical monitoring requirements, and the most recent Virginia WQS.

TABLE 3. PARAMETER BENCHMARK VALUES

Parameter Name	**Benchmark Level**	**Source(s)**
Aluminum, Total (pH 6.5-9)	1.10 mg/L	14
Ammonia	2.14 mg/L	12
Antimony, Total	0.64 mg/L	4
Arsenic, Total (c)	0.150 mg/L	2, 12
Beryllium, Total (c)	0.13 mg/L	3
Biochemical Oxygen Demand (5 day)	30 mg/L	5
Cadmium, Total (H)	0.0018 mg/L	1, 12
Chromium, Total	0.016 mg/L	12
Chemical Oxygen Demand	120 mg/L	6
Copper, Total (H)	0.013 mg/L	12
Cyanide	0.022 mg/L	1, 12
Lead, Total (H)	0.082 mg/L	2
Mercury, Total	0.0014 mg/L	1
Nickel, Total (H)	0.47 mg/L	1
pH	6.0-9.0 SU	5
Selenium, Total (*)	0.005 mg/L	12
Silver, Total (H)	0.0032 mg/L	1
Total Kjeldahl Nitrogen (added by DEQ)	1.5 mg/L	8
Total Nitrogen (added by DEQ)	2.2 mg/L	8
Total Organic Carbon (added by DEQ)	110 mg/L	11
Total Phosphorus	2.0 mg/L	7, 13
Total Petroleum Hydrocarbons (added by DEQ)	15 mg/L	10
Total Suspended Solids	100 mg/L	8
Turbidity	50 NTU	9

Zinc, Total (H)	0.120 mg/L	12

Sources:
1. EPA Recommended Ambient Water Quality Criteria (acute, or low observed effect level (LOEL))
2. EPA Recommended Ambient Water Quality Criteria (chronic)
3. EPA Recommended Ambient Water Quality Criteria (Beryllium)
4. EPA Recommended Ambient Water Quality Criteria (Human Health)
5. Secondary Treatment Regulations (40 CFR 133)
6. North Carolina WQS - Factor of 4 times BOD5 concentration
7. North Carolina WQS - stormwater benchmark
8. National Urban Runoff Program (NURP) median concentration
9. Combination of Stormwater Effects Handbook (Burton and Pitt, 2001), Idaho WQS, and DMR data review
10. Discharge limitations and compliance data
11. Stormwater Effluent Limitation Guidelines (40 CFR Part 419) - Median Concentration
12. Virginia Water Quality Standards
13. Virginia policy for Nutrient Enriched Waters, 9VAC25-40-10 et seq
14. Industrial Stormwater Technical Memo for aluminum and copper criteria percentiles (EPA, 2019)

Notes:
(*) Limit established for oil and gas exploration and production facilities only.
(c) carcinogen
(H) hardness dependent

Assumptions:
Receiving water temperature - 20 C
Receiving water pH - 7.8
Receiving water hardness CaCO3 - 100 mg/L
Receiving water salinity - 20 g/kg
Acute to Chronic Ratio (ACR) - 10

There were several benchmark changes for the 2024 general permit in accordance with the recommendations of the Technical Advisory Committee, as noted below.

Aluminum: Updated to match the 2021 MSGP benchmark (1.10 mg/L). There is no Virginia WQS for aluminum.

Arsenic: Updated to match the 2021 MSGP benchmark, which matches the chronic criteria in the current Virginia WQS (0.150 mg/L).

Cadmium: Updated to match the 2021 MSGP benchmark, which matches the acute criteria in the current Virginia WQS (0.0018 mg/L).

Copper: EPA's copper benchmark (0.00519 mg/L) in the 2021 MSGP is based on the biotic ligand model. This model was not adopted by Virginia for copper in the 2022 rulemaking (Triennial Review) of the WQS. Thus, the copper benchmark was updated to match the current acute criteria in the Virginia WQS (0.013 mg/L).

Iron: Removed. EPA removed iron as a benchmark in the 2021 MSGP due to lack of acute toxicity. There is no acute criteria for iron in the Virginia WQS.

Lead: Updated to match the 2021 MSGP benchmark (0.082 mg/L), which is slightly lower than the acute criteria in the current Virginia WQS (0.094 mg/L).

Magnesium: Removed. EPA removed magnesium as a benchmark in the 2021 MSGP due to lack of acute toxicity. There is no Virginia WQS for magnesium.

Silver: Updated to match the 2021 MSGP benchmark (0.0032 mg/L), which is slightly lower than the acute criteria in the current Virginia WQS (0.0034 mg/L).

To reiterate, benchmark concentrations ***are not effluent limitations*** and should not be interpreted as such. These values are merely levels to determine if a stormwater discharge from any given facility merits further monitoring to ensure that the facility has been successful in implementing a SWPPP. As such, these levels represent a target concentration for a facility to achieve through implementation of pollution prevention measures at the facility.

c. Compliance Monitoring for Facilities Subject to Numeric Effluent Limitations.

Applicability: Facility-specific (see Table 4)

Frequency: Every six months each year of general permit coverage (January-June and July-December)

Due Date: July 10 for the January-June period and January 10 for the July-December period

Where to Submit: Submit results electronically through eDMR system

Two types of effluent limitation compliance monitoring have been identified in the permit: (1) facilities subject to stormwater effluent limitation guidelines; and (2) coal pile runoff monitoring.

(1) Facilities Subject to Stormwater Effluent Limitation Guidelines. Compliance monitoring requirements are imposed under this permit to ensure that discharges subject to numerical effluent limitations under the stormwater effluent limitations guidelines are in compliance with those limitations. Eight types of stormwater discharges subject to effluent limitation guidelines may be covered under this general permit. These discharges include contaminated stormwater runoff from timber products facilities, phosphate fertilizer manufacturing facilities, runoff associated with asphalt paving or roofing emulsion production, runoff from material storage piles at cement manufacturing facilities, contaminated runoff from hazardous waste landfills, contaminated runoff from municipal solid waste landfills, coal pile runoff at steam electric generating facilities, and airport deicing at primary airports (if covered under Sector AD). Effluent limitations are listed in the Sector-Specific Permit Requirements section of the permit (Part IV). These limitations are required under the VPDES permit regulation, 9VAC25-31-220 A, and EPA's stormwater effluent limitation guidelines in the Code of Federal Regulations at 40 CFR Part 429, Part 418, Part 443, Part 411, Part 445 Subparts A and B, Part 449, and Part 423. The effluent limitations for the eight discharge categories are listed in Table 4.

TABLE 4. NUMERIC EFFLUENT LIMITATIONS

Industrial Sector	Parameter	Effluent Limitation
Sector A - Timber Products. Wet Decking Discharges at Log Storage and Handling Areas (40 CFR Part 429 Subpart I) (SIC 2411).	pH	6.0 - 9.0 s.u.
	Debris, woody material (e.g., bark, twigs, branches, heartwood, or sapwood)	No discharge of debris that will not pass through a 2.54 cm (1") diameter round opening.
Sector C - Chemical and Allied Products Manufacturing. Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR 418.10) (SIC 2874).	Total Phosphorus (as P)	105 mg/L, Daily Maximum 35 mg/L, 30-day Average
	Fluoride	75 mg/L, Daily Maximum 25 mg/L, 30-day Average
Sector D - Asphalt Paving and Roofing Materials. Discharges from areas where production of asphalt paving and roofing emulsions occurs (40 CFR Part 443 Subpart A) (SIC 2951, 2952).	Total Suspended Solids (TSS)	23 mg/L, Daily Maximum 15 mg/L, 30-day Average
	Oil and Grease	15 mg/L, Daily Maximum 10 mg/L, 30-day Average
	pH	6.0 - 9.0 s.u.

Sector E - Glass, Clay, Cement, Concrete and Gypsum Products. Cement Manufacturing Facility, Material Storage Run-off (40 CFR Part 411 Subpart C).	Total Suspended Solids (TSS)	50 mg/L, Daily Maximum
	pH	6.0 - 9.0 s.u.
Sector K - Hazardous Waste TSD Facilities. Hazardous Waste Treatment, Storage, or Disposal Facilities (Industrial Activity Code "HZ") Subject to the Provisions of 40 CFR Part 445 Subpart A.	Biochemical Oxygen Demand (BOD_5)	220 mg/L, Daily Maximum 56 mg/L, 30-day Average
	Total Suspended Solids (TSS)	88 mg/L, Daily Maximum 27 mg/L, 30-day Average
	Ammonia	10, Daily Maximum mg/L 4.9 mg/L, 30-day Average
	Alpha Terpineol	0.042, Daily Maximum mg/L 0.019 mg/L, 30-day Average
	Aniline	0.024, Daily Maximum mg/L 0.015 mg/L, 30-day Average
	Benzoic Acid	0.119, Daily Maximum mg/L 0.073 mg/L, 30-day Average
	Naphthalene	0.059, Daily Maximum mg/L 0.022 mg/L, 30-day Average
	p-Cresol	0.024, Daily Maximum 0.015 mg/L, 30-day Average
	Phenol	0.048, Daily Maximum mg/L 0.029 mg/L, 30-day Average
	Pyridine	0.072, Daily Maximum mg/L 0.025 mg/L, 30-day Average
	Arsenic (Total)	1.1, Daily Maximum mg/L 0.54 mg/L, 30-day Average
	Chromium (Total)	1.1, Daily Maximum mg/L 0.46 mg/L, 30-day Average
	Zinc (Total)	0.535, Daily Maximum mg/L 0.296 mg/L, 30-day Average

	pH	Within the range of 6.0 - 9.0 s.u.
Sector L – Landfills. Landfills (Industrial Activity Code "LF") Which Are Subject to the Requirements of 40 CFR Part 445 Subpart B.	Biochemical Oxygen Demand (BOD_5)	140 mg/L, Daily Maximum 37 mg/L, 30-day Average
	Total Suspended Solids (TSS)	88 mg/L, Daily Maximum 27 mg/L, 30-day Average
	Ammonia	10, Daily Maximum mg/L 4.9 mg/L, 30-day Average
	Alpha Terpineol	0.033, Daily Maximum mg/L 0.016 mg/L, 30-day Average
	Benzoic Acid	0.12, Daily Maximum mg/L 0.071 mg/L, 30-day Average
	p-Cresol	0.025, Daily Maximum mg/L 0.014 mg/L, 30-day Average
	Phenol	0.026, Daily Maximum mg/L 0.015 mg/L, 30-day Average
	Zinc (Total)	0.20, Daily Maximum mg/L 0.11 mg/L, 30-day Average
	pH	Within the range of 6.0 - 9.0 s.u.
Sector O – Steam Electric. Coal pile runoff at steam electric generating facilities (40 CFR Part 423).	Total Suspended Solids (TSS)	50 mg/l, max
	pH	6.0 - 9.0 min. and max.
Sector AD (As needed for primary airports). Discharges from deicing operations at primary airports, (40 CFR Part 449)	Airfield Pavement Deicing, Ammonia as Nitrogen	14.7 mg/L, Daily Maximum
	Aircraft Deicing (NSPS), Chemical Oxygen Demand (COD)	271 mg/L, Daily Maximum 154 mg/L, Weekly Average

(2) Coal Pile Runoff Monitoring. This permit establishes effluent limitations of 50 mg/L total suspended solids and a pH range of 6.0-9.0 for coal pile runoff. Any untreated overflow from facilities designed, constructed, and operated to treat the volume of coal pile runoff associated with a 10-year, 24-hour rainfall event (maximum design criteria, 9VAC25-870 et seq.) is not subject

to the 50 mg/L limitation for total suspended solids. The permit extends these effluent limitations to all industrial operations that discharge coal pile runoff, where the coal pile runoff can be defined as a stormwater discharge associated with industrial activity (i.e., at a plant in one of the industrial sectors listed in Table 1). DEQ has adopted these technology-based pH limitations in this general permit in accordance with setting limits on a case-by-case basis as allowed under 9VAC25-31-220 A. These case-by-case limits are derived by transferring the known achievable technology from an effluent guideline to a similar type of discharge. When developing these technology-based limitations, variables such as rainfall pH, sizes of coal piles, pollutant characteristics, and runoff volume were considered. Therefore, these variables need not be considered again. As discussed above, these pH limitations are technology-based and are not based on water quality. Facilities must comply with these limitations upon submittal of the registration statement. Facilities with treatment works for coal pile runoff are expected to meet the limitations.

d. Impaired Waters Monitoring, For Both Facilities With and Without an Approved TMDL.

Applicability: If notified by DEQ

Frequency: Every six months each year of general permit coverage (January-June and July-December)

Due Date: July 10 for the January-June period and January 10 for the July-December period

Where to Submit: Submit results electronically through eDMR system

Two types of impaired waters monitoring have been identified in the permit: (1) facilities discharging to impaired waters with an approved TMDL wasteload allocation; and (2) facilities discharging to impaired waters without an approved TMDL wasteload allocation.

(1) Facilities Discharging to Impaired Waters with an Approved TMDL Wasteload Allocation. Monitoring requirements for facilities subject to TMDL wasteload allocations are included in permit to ensure that discharges are in compliance with those allocations. DEQ will notify facilities in writing that they are subject to a TMDL wasteload allocation and that they are required to monitor their discharges for the pollutant of concern to evaluate compliance with the TMDL allocation. Monitoring must be performed at least semiannually (twice per year), and the monitoring periods are January through June, and July through December, unless another sampling frequency is determined by the department for polychlorinated biphenyls (PCBs). Monitoring commences with the first full monitoring period after the owner is granted coverage under the permit.

If the pollutant subject to the TMDL wasteload allocation is below the quantitation level in all of the samples from the first four monitoring periods, the permittee may request to the Department in writing that further sampling be discontinued, unless the TMDL has specific instructions to the contrary (in which case those instructions shall be followed). The laboratory certificate of analysis shall be submitted with the request. If approved, documentation of this shall be kept with the SWPPP.

If the pollutant subject to the TMDL wasteload allocation is above the quantitation level in any of the samples from the first four monitoring periods, the permittee must continue the scheduled TMDL monitoring throughout the term of the permit.

Upon written notification from the department, facilities exceeding the TMDL wasteload allocation shall prepare and submit a pollutant minimization plan (PMP) designed to investigate the location and potential reduction of sources in the facility's stormwater discharges. The PMP shall be developed and submitted to the department for approval within 180 days of the receipt of notification from the department.

The PMP shall include the following items, as appropriate:

(a) Facility contact for the contents of the PMP and any activities associated with the PMP;

(b) A proposed implementation schedule for minimization activities and prospective milestones;

(c) Proposed actions for known or probable sources;

(d) Proposed action to find and control unknown sources;

(e) A summary of any previous minimization activities; and,

(f) Information on continuing assessment of progress, which may include establishment of criteria to evaluate whether the location and potential reduction of sources have been addressed.

Chesapeake Bay TMDL requirements can be found in the final section of this fact sheet.

(2) Facilities Discharging to Impaired Waters without an Approved TMDL Wasteload Allocation. Monitoring requirements for facilities discharging to impaired waters without an approved TMDL wasteload allocation are included in this permit to ensure that the facility is not causing or contributing to the water quality impairment. DEQ will notify facilities in writing that they are subject to the impaired waters monitoring, and that they are required to monitor their discharges for the pollutants that are causing the impairment. Monitoring must be performed at least semiannually (twice per year), and the monitoring periods are January through June, and July through December, unless another sampling frequency is determined by the department for polychlorinated biphenyls (PCBs). Monitoring commences with the first full monitoring period after the owner is granted coverage under the permit.

If the pollutant for which the waterbody is impaired is suspended solids, turbidity or sediment/sedimentation, the permittee must monitor for Total Suspended Solids (TSS). If the pollutant for which the waterbody is impaired is expressed in the form of an indicator or surrogate pollutant, the permittee must monitor for that indicator or surrogate pollutant. No monitoring is required when a waterbody's biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is specified as causing the impairment, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or temperature.

If the pollutant for which the water is impaired is below the quantitation level in the discharges from the facility, or it is above the quantitation level but its presence is caused solely by natural background sources, the permittee may request to the Board that the impaired water monitoring be discontinued. To support a determination that the pollutant's presence is caused solely by natural background sources, the permittee must submit the following documentation with the request and keep a copy with the SWPPP: (i) an explanation of why the permittee believed that the presence of the impairment pollutant in the facility's discharge is not related to the activities at the facility; and (ii) data or studies that tie the presence of the impairment pollutant in the facility's discharge to natural background sources in the watershed. 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 at the facility's site, or pollutants in run-on from neighboring sources which are not naturally occurring.

e. Monitoring Requirements:

(1) Collection and analysis of samples. Sampling requirements are to be assessed on an outfall-by-outfall basis and are to be collected and analyzed in accordance with the requirements of Part II A (Monitoring, Conditions Applicable to All VPDES Permits).

(2) When and how to sample. A minimum of one grab sample is to be taken from each discharge associated with industrial activity resulting from a storm event that produces a discharge from the site, providing the interval from the preceding storm event discharge is at least 72 hours. The 72-hour storm interval is waived if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring is to be performed at a time when a measurable discharge occurs at the site. For discharges from a stormwater management structure, the monitoring shall be performed at a time when a measurable discharge occurs from the structure.

The grab sample is to be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first three hours of the discharge, provided that the permittee explains why a grab sample during the first 30 minutes was impracticable. This information is to be submitted with the e-DMR and maintained with the SWPPP. If the sampled discharge commingles with process or nonprocess water, the

permittee must attempt to sample the stormwater discharge before it mixes with the nonstormwater.

(3) Storm Event Data. For each monitoring event (except snowmelt monitoring), along with the monitoring results, the permittee must identify the date of the storm event sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the interval between the storm event sampled and the end of the previous storm event discharge. For snowmelt monitoring, the permittee must identify the date of the sampling event.

(4) Monitoring periods. As noted in the sections above, visual monitoring is quarterly (Jan-Mar, Apr-Jun, July-Nov, Oct-Dec) while benchmark, effluent limitation, and impaired waters monitoring is semi-annual (Jan-June and July-Dec).

Chesapeake Bay TMDL sampling is quarterly and is discussed later in this fact sheet.

f. Monitoring Waivers, Inactive and Unstaffed Sites, Representative Outfalls, Record Keeping:

(1) Monitoring Waivers: The general permit allows permittees to request a waiver of the benchmark monitoring requirements under certain circumstances. Permittees may request a waiver of the benchmark monitoring requirements on a outfall-by-outfall basis if they can demonstrate that the average of the samples at the outfall for four consecutive monitoring periods are all below the pollutant-specific benchmark concentration values. If so, then monitoring during the remaining permit monitoring periods may be waived. The waiver is conditional on the facility maintaining industrial operations and best management practices that will ensure a quality of stormwater discharges consistent with the average concentrations recorded during the earlier monitoring period. The waiver request must be submitted to the Department, along with the supporting monitoring data, and a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility that drains to the outfall for which the sampling waiver is requested. Waiver requests are evaluated by the Department based upon: (i) benchmark monitoring results below the benchmark concentration values; (ii) a favorable compliance history (including inspection results); and (iii) no outstanding enforcement actions. The monitoring waiver may be revoked by the Department for just cause. The permittee will be notified in writing that the monitoring waiver is revoked, and that the benchmark monitoring requirements are again in force and will remain in effect until the permit's expiration date.

Permittees may take a substitute sample during the next qualifying storm event if adverse weather conditions make it unsafe or impossible to collect the sample.

(2) Inactive and unstaffed sites (including temporarily inactive sites). A waiver of the quarterly visual assessments, routine facility inspections, and monitoring requirements (including benchmark, effluent limitation, and impaired waters monitoring) may be granted by the Department at a facility that is both inactive and unstaffed, as long as the facility remains inactive and unstaffed and there are no industrial materials or activities exposed to stormwater. The owner is only required to conduct an annual comprehensive site inspection. An inactive and unstaffed sites waiver request has to be submitted to the Department for approval. If circumstances change and industrial materials or activities become exposed to stormwater, or the facility becomes either active or staffed, the permittee has to notify the Department within 30 days, and all quarterly visual assessments, routine facility inspections, and monitoring requirements must resume immediately.

Inactive and unstaffed facilities covered under Sector G (Metal Mining) and Sector H (Coal Mines and Coal Mining-Related Facilities) are not required to meet the "no industrial materials or activities exposed to stormwater" standard to be eligible for this waiver, consistent with the conditional exemption requirements established in Part IV Sector G and Part IV Sector H of the permit.

(3) Representative Outfalls - Substantially Identical Discharges. If a facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, the permittee may conduct monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall or outfalls. The substantially identical outfall monitoring provisions apply to quarterly visual monitoring, benchmark monitoring, and impaired waters monitoring (both those with and without

an approved TMDL). The substantially identical outfall monitoring provisions are not available for numeric effluent limits monitoring.

The permittee has to include the following information in the SWPPP:

(a) The locations of the outfalls;

(b) Why the outfalls are expected to discharge substantially identical effluents, including evaluation of monitoring data where available; and

(c) Estimates of the size of the drainage area (in square feet) for each of the outfalls.

(4) Record Keeping: This permit requires permittees to retain all permit related records for a minimum of 3 years from the date that coverage under this permit expires or is terminated.

g. Corrective Actions and Follow-up Reporting

(1) Corrective Actions. A corrective action requirement is included in the permit for actions the permittee must take in the event of the following:

(a) Routine facility inspections, inspections by local, state or federal officials, or any other process, observation or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements; or

(b) There is any exceedance of an effluent limitation (including coal pile runoff), TMDL wasteload allocation, or a reduction required by a local ordinance established by a municipality to meet Chesapeake Bay TMDL requirements; or

(c) The department determines, or the permittee becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards; or

(d) Benchmark monitoring results exceed the benchmark concentration value for a parameter.

The permittee is required to review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP are to be completed within 60 days following the discovery of a deficiency. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part III C), implementation is to be completed before the next anticipated storm event if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the department. In cases where construction is necessary to implement control measures, the permittee is required to include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the SWPPP will be modified to include appropriate nonstructural and temporary controls to be implemented in the affected portion of the facility before completion of the permanent control measure.

Any corrective actions taken are to be documented and retained with the SWPPP. Any control measure modifications are to be dated and document the amount of time taken to modify the applicable control measures or implement additional control measures.

(2) Natural background pollutant levels. If the concentration of a pollutant exceeds a benchmark concentration value, and the permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:

(a) The concentration of the benchmark monitoring result is less than or equal to the concentration of that pollutant in the natural background;

(b) The permittee documents and maintains with the SWPPP the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's stormwater discharges; and

(c) The permittee notifies the department on the benchmark monitoring DMR 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 the facility's site, or pollutants in run-on from neighboring sources that are not naturally occurring.

(3) Follow-up Reporting. If at any time monitoring results show that discharges from the facility exceed an effluent limitation or a TMDL wasteload allocation, or that discharges from the facility are causing or contributing to an exceedance of a water quality standard, the permittee must take immediate steps to eliminate the exceedances. For this permit reissuance, an Exceedance Report must be submitted to the Department within 30 calendar days of implementing the relevant corrective actions. The report must include the following:

(a) General permit registration number;

(b) Facility name and address;

(c) Receiving water for each outfall exceeding an effluent limitation of TMDL wasteload allocation;

(d) Monitoring data from the event being reported;

(e) A narrative description of the situation;

(f) A description of actions taken since the event was discovered and steps taken to minimize to the extent feasible pollutants in the discharge; and

(g) A local facility contact name, email address, and phone number.

Part I.B – Permit Special Conditions

1. Authorized Nonstormwater Discharges. This general permit does not authorize non-stormwater discharges that are mixed with stormwater *except* as provided below. The only non-stormwater discharges that are intended to be authorized under this permit include:

   a. Discharges from emergency firefighting activities or firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia;

   b. Fire hydrant flushings, managed in a manner to avoid an instream impact;

   c. Potable water, including water line flushings, managed in a manner to avoid an instream impact;

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

   e. Irrigation drainage;

   f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;

   g. Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled, or similarly treated prior to discharge;

   h. Pavement wash waters provided no soaps, solvents, detergents or hazardous cleaning products are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled or leaked material is removed prior to washing), and the wash water is filtered, settled, or similarly treated prior to discharge;

   i. Uncontaminated groundwater or spring water;

   j. Foundation or footing drains where flows are not contaminated with process materials; and

   k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

   This permit does not require pollution prevention measures to be identified and implemented for non-stormwater flows from fire-fighting activities because these flows will generally be unplanned emergency situations where it is necessary to take immediate action to protect the public.

Where a stormwater discharge is mixed with non-stormwater that is not authorized by this general permit or another VPDES permit, the discharger should submit the appropriate application forms (Forms 1, 2C, and/or 2E) to obtain separate VPDES permit coverage of the non-stormwater portion of the discharge.

2. Releases of Hazardous Substances or Oil. The permit prohibits discharges of oil and-hazardous substances from spills. The discharge of hazardous substances or oil from a facility must be eliminated or minimized in accordance with the SWPPP developed for the facility. If there is a discharge of a material in excess of a reportable quantity established under 40 CFR Parts 110, 117, or 302 the permittee must make a report to DEQ within 24 hours. The permittee must also notify the MS4 operator if the release enters an MS4. The pollution prevention plan for the facility must be reviewed and revised as necessary to prevent a reoccurrence of the spill. This does not relieve the permittee from any reporting to federal or state authorities required under 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 or § 62.1-44.34:19 of the Code of Virginia.

3. Co-located Industrial Activity. Where more than one regulated industrial activity occurs at the site, the permittee is required to implement the industry specific monitoring and pollution prevention requirements for all applicable industrial categories. Co-located industrial activities occur when activities being conducted onsite meet more than one of the industrial sector descriptions in the permit (e.g., a landfill at a wood treatment facility or a vehicle maintenance garage at an asphalt batching plant). Determination of which co-located activities require action is the responsibility of the permittee.

   Authorizing co-located discharges allows industrial facilities to develop pollution prevention plans that fully address all industrial activities at the site. For example, if a wood treatment facility has a landfill, the pollution prevention plan requirements for the wood treatment facility will differ greatly from those needed for the landfill. Therefore, by authorizing co-located industrial activities, the wood treatment facility will develop a pollution prevention plan to meet the requirements addressing the stormwater discharges from the wood treatment facility and the landfill. The facility is also subject to applicable monitoring requirements for each type of industrial activity as described in the applicable sections of the permit. By monitoring the discharges from the different industrial activities, the facility can better determine the effectiveness of the pollution prevention plan requirements for controlling stormwater discharges from all activities.

4. Combined Discharges. The stormwater discharges regulated by the permit may be combined with unregulated stormwater provided that the combined effluent meets the requirements of the general permit.

5. Floating Solids or Visible Foam. The permit prohibits discharges of waste, garbage, or floating debris in other than trace amounts.

6. Responsibility to Comply With Any Other Applicable Federal, State, or Local Statute, Ordinance, or Regulation. Approval for coverage under this general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation. This condition comes from the regulation section (9VAC25-151-50 E) but is included in the general permit section for emphasis.

7. Discharges to Waters Subject to TMDL Wasteload Allocations. The permit requires facilities that are a source of the specified pollutant of concern to waters for which a TMDL wasteload allocation has been approved by EPA prior to the term of this permit to incorporate measures and controls into the SWPPP that are consistent with the assumptions and requirements of the TMDL. DEQ will provide notification to the owner in writing that the facility is subject to the TMDL requirements. The facility's SWPPP needs to specifically address any conditions or requirements included in the TMDL that are applicable to discharges from the facility. If there is a specific numeric wasteload allocation established in the TMDL that applies to discharges from the facility, the owner has to perform any required monitoring in accordance with the permit requirements and implement BMPs designed to meet that allocation.

   Discussion of discharges subject to the Chesapeake Bay TMDL are found later in this fact sheet.

8. Discharges through a regulated MS4 to waters subject to the Chesapeake Bay TMDL. In addition to the requirements of this permit, any facility with industrial activity discharges through a regulated MS4 that is notified by the MS4 operator that the locality has adopted ordinances to meet the Chesapeake Bay TMDL must incorporate measures and controls into their SWPPP to comply with applicable local TMDL ordinance requirements.

9. Expansion of facilities that discharge to waters subject to the Chesapeake Bay TMDL. Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan (November 29, 2010), states that the wasteloads from any expansion of an existing permitted facility discharging stormwater in the Chesapeake Bay watershed cannot exceed the nutrient and sediment loadings that were discharged from the expanded portion of the land prior to the land being developed for the expanded industrial activity.

   For any industrial activity area expansions (i.e., construction activities, including clearing, grading and excavation activities) that commence on or after July 1, 2024 (the effective date of this permit), the permittee has to document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area prior to the land being developed, and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial activity. Any land disturbance that is exempt from permitting under the Virginia Stormwater Management Act (§ 62.1-44.15:34 C of the Code of Virginia) is exempt from this requirement.

   The permittee may use the VSMP water quality design criteria to meet the above requirements. Under this criteria, the total phosphorus load can't exceed the greater of: (i) the total phosphorus load that was discharged from the expanded portion of the land prior to the land being developed for the industrial activity or (ii) 0.41 pounds per acre per year. Compliance with the water quality design criteria may be determined utilizing the Virginia Runoff Reduction Method or another equivalent methodology approved by the department. Design specifications and pollutant removal efficiencies for specific BMPs can be found on the Virginia Stormwater BMP Clearinghouse website.

   The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the no net increase requirement.

10. Water Quality Protection. The permit requires that discharges authorized by the permit be controlled as necessary to meet applicable water quality standards. The department expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards. If there is evidence indicating that the stormwater discharges authorized by the permit are causing, have the reasonable potential to cause, or are contributing to an excursion above an applicable water quality standard, an excursion above a TMDL wasteload allocation, or are causing downstream pollution (as defined in § 62.1-44.3 of the Code of Virginia), the department may require the permittee to take corrective action in accordance with the permit, and include and implement appropriate controls in the SWPPP to correct the problem, or may require the permittee to obtain an individual permit.

11. Adding/Deleting Stormwater Outfalls. The permit allows the permittee to add new and/or delete existing stormwater outfalls at the facility as necessary or appropriate. The permittee must update the SWPPP and notify DEQ of all outfall changes within 30 days of the change and submit a copy of the updated SWPPP site map with their notification.

12. Antidegradation Requirements for New or Increased Discharges to High Quality Waters. Facilities that add new outfalls or increase their discharges from existing outfalls that discharge directly to high quality waters designated under Virginia's water quality standards antidegradation policy may be notified by the Department that additional control measures, or other permit conditions are necessary to comply with the applicable antidegradation requirements or may be notified that an individual permit is required.

13. Termination of permit coverage. The termination of permit coverage section was taken from the regulation section (previously 9VAC25-151-65) and inserted into the permit special conditions section. This was done so the permittee (who usually only has a copy of the permit) would have the requirements in the permit itself.

    a. The owner may terminate coverage under this general permit by filing a complete notice of termination. The notice of termination may be filed after one or more of the following conditions have been met:

       (1) Operations have ceased at the facility and there are no longer discharges of stormwater associated with industrial activity from the facility;

       (2) A new owner has assumed responsibility for the facility (Note: A notice of termination does not have to be submitted if a VPDES Change of Ownership Agreement Form has been submitted);

(3) All stormwater discharges associated with industrial activity have been covered by an individual VPDES permit; or

(4) Termination of coverage is being requested for another reason, provided the board agrees that coverage under this general permit is no longer needed.

b. The notice of termination must contain the following information:

(1) Owner's name, mailing address, telephone number, and email address (if available);

(2) Facility name and location;

(3) VPDES industrial stormwater general permit registration number;

(4) The basis for submitting the notice of termination, including:

(a) A statement indicating that a new owner has assumed responsibility for the facility;

(b) A statement indicating that operations have ceased at the facility, and there are no longer discharges of stormwater associated with industrial activity from the facility;

(c) A statement indicating that all stormwater discharges associated with industrial activity have been covered by an individual VPDES permit; or

(d) A statement indicating that termination of coverage is being requested for another reason (state the reason).

(5) The following certification: "I certify under penalty of law that all stormwater discharges associated with industrial activity from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual permit, or that I am no longer the owner of the industrial activity or permit coverage should be terminated for another reason listed above. I understand that by submitting this notice of termination, that I am no longer authorized to discharge stormwater associated with industrial activity in accordance with the general permit, and that discharging pollutants in stormwater associated with industrial activity to surface waters is unlawful where the discharge is not authorized by a VPDES permit. I also understand that the submittal of this notice of termination does not release an owner from liability for any violations of this permit or the Clean Water Act."

Part II – Conditions Applicable to All VPDES Permits

This general permit is a VPDES permit. As such, it is necessary to include certain conditions required by the VPDES Permit Regulation, 9VAC25-31. These conditions are included in all VPDES permits. With a few minor exceptions, the language is not modified to reflect their use in the general permit. Conditions in this section of the permit may not have direct application at all covered facilities.

Parts III – Stormwater Pollution Prevention Plans

The conditions of this permit have been designed to comply with the technology-based standards of the CWA (BAT/BCT). Based on a consideration of the appropriate factors for BAT and BCT requirements, the general permit lists a set of tailored requirements for developing and implementing SWPPPs.

For discharges covered by the permit, other than those regulated by numeric effluent limitations, the permit conditions reflect DEQ's decision to identify a number of best management practices and traditional stormwater management practices which prevent pollution in stormwater discharges as the BAT/BCT level of control for the majority of stormwater discharges covered by this permit. The permit conditions applicable to these discharges are not numeric effluent limitations, but rather are flexible requirements for developing and implementing site specific plans to minimize and control pollutants in stormwater discharges associated with industrial activity.

DEQ is authorized under 9VAC25-31-220 K (the VPDES Permit Regulation) to impose BMPs in lieu of numeric effluent limitations in VPDES permits when the agency finds numeric effluent limitations to be infeasible. DEQ may also impose BMPs which are "reasonably necessary ... to carry out the purposes of the Law and the CWA" under 9VAC25-31-220 K 3. The conditions in the permit are issued under the authority of both of these regulatory provisions. The pollution prevention or BMP requirements in this permit operate as limitations on

effluent discharges that reflect the application of BAT/BCT. This is because the BMPs identified require the use of source control technologies which, in the context of this general permit, are the best available of the technologies economically achievable (or the equivalent BCT finding).

All facilities intending to be covered by this general permit must prepare and implement a SWPPP. Existing general permit holders that are renewing coverage under the permit must update and implement any changes to their SWPPP within 90 days of the Board granting coverage under the permit. Facilities that are seeking new coverage under the general permit must develop and implement the SWPPP prior to submittal of the Registration Statement. Facilities are not required to submit the pollution prevention plans for review unless they are requested by the Department. When a plan is reviewed by DEQ, the Director can require the permittee to amend the plan if it does not meet the minimum permit requirements.

The permit addresses general SWPPP requirements that apply to all facilities that are covered under the permit, and sector-specific SWPPP requirements that apply to specific categories of industries (see discussion of Part IV below). The following is a discussion of the common SWPPP requirements for all industries. These are the permit requirements which apply to discharges associated with any of the industrial activities covered by this permit. These common requirements may be amended or further clarified in the industry sector-specific pollution prevention plan requirements of the permit.

Both the general SWPPP and the industry sector-specific requirements were initially derived from the 2000 EPA MSGP and have been updated with each general permit reissuance in accordance with each iteration of the EPA MSGP. The requirements are based on an evaluation of the nature of the industrial activity, the pollutants in that activity's stormwater and applicable pollution control options. This framework provides the necessary flexibility to address the variable risk for pollutants in stormwater discharges associated with the different types of industrial activity addressed by this permit. This approach also assures that facilities have the opportunity to identify procedures to prevent stormwater pollution at a particular site that are appropriate, given processes employed, engineering aspects, functions, costs of controls, location, and age of the facility. The approach taken also allows the flexibility to establish controls that can appropriately address different sources of pollutants at different facilities. These industry sector-specific requirements are additive for facilities where co-located industrial activities occur. For example, if a facility has both a primary metals operation and a scrap recycling operation, then that facility is subject to the pollution prevention plan requirements of both of those sectors in the permit.

The pollution prevention approach in this general permit focuses on two major objectives: (1) to identify sources of pollution potentially affecting the quality of discharges from the facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in discharges from the facility and to ensure compliance with the terms and conditions of this permit.

The SWPPP requirements in the general permit are intended to facilitate a process whereby the operator of the industrial facility thoroughly evaluates potential pollution sources at the site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in stormwater runoff. The process involves the following four steps: (1) formation of a team of qualified plant personnel who will be responsible for preparing the plan and assisting the plant manager in its implementation; (2) site description and assessment of potential stormwater pollution sources; (3) selection and implementation of appropriate management practices and controls; and (4) periodic evaluation of the effectiveness of the plan to prevent stormwater contamination and comply with the terms and conditions of this permit.

SWPPPs may reference the existence of other plans such as those for erosion and sediment control (ESC), Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under Section 31.1 of the CWA, or Best Management Practices (BMP) programs otherwise required for the facility as long as the other plan meets the minimum requirements of the permit and it is incorporated into the SWPPP. Any other plans so referenced become enforceable parts of the permit.

The pollution prevention approach is the most environmentally sound and cost-effective way to control the discharge of pollutants in stormwater runoff from industrial facilities. Two classes of management practices are generally employed at industries to control the non-routine discharge of pollutants from sources such as stormwater runoff, drainage from raw material storage and waste disposal areas, and discharges from places where spills or leaks have occurred. The first class of management practices includes those that are low in cost, applicable to a broad class of industries and substances, and widely considered essential to a good pollution control program. Some examples of practices in this class are good housekeeping, employee

training, and spill response and prevention procedures. The second class includes management practices that provide a second line of defense against the release of pollutants. This class addresses containment, mitigation, and cleanup. Experience with these practices and controls has shown that they can be used in permits to reduce pollutants in stormwater discharges in a cost-effective manner. Pollution prevention has been and continues to be the cornerstone of the VPDES permitting program for stormwater.

1. Contents of the Plan. The SWPPPs generally must describe the following elements:

   a. Pollution Prevention Team. As a first step in the process of developing and implementing a SWPPP, permittees are required to identify a qualified individual or team of individuals to be responsible for developing the plan and assisting the facility or plant manager in its implementation. When selecting members of the team, the plant manager should draw on the expertise of all relevant departments within the plant to ensure that all aspects of plant operations are considered when the plan is developed. The plan must clearly describe the responsibilities of each team member as they relate to specific components of the plan. In addition to enhancing the quality of communication between team members and other personnel, clear delineation of responsibilities will ensure that every aspect of the plan is addressed by a specified individual or group of individuals. Pollution Prevention Teams may consist of one individual where appropriate (e.g., in certain small businesses with limited stormwater pollution potential).

   b. Site Description. Each SWPPP must describe activities, materials, and physical features of the facility that may contribute significant amounts of pollutants to stormwater runoff or, during periods of dry weather, result in pollutant discharges through the separate storm sewers or stormwater drainage systems that drain the facility. This assessment of stormwater pollution risk will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Some operators may find that significant amounts of pollutants are running onto the facility property. Such operators should identify and address the contaminated run-on in the SWPPP. If the run-on cannot be addressed or diverted by the permittee, the Department should be notified. If necessary, the DEQ may require the operator of the adjacent facility to obtain a permit.

      The plan must contain a map of the site that shows the location of outfalls covered by the permit (or by other VPDES permits), the pattern of stormwater drainage, an indication of the types of discharges contained in the drainage areas of the outfalls, structural features that control pollutants in runoff, surface water bodies (including wetlands), places where significant materials are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the date of the submission of a registration statement to be covered under this permit. The map also must show areas where the following 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; access roads, rail cars and tracks; the location of transfer of substance in bulk; and machinery. The map must also show the location and description of non-stormwater discharges, and the location and source of run-off from adjacent property containing significant quantities of pollutants of concern to the facility (the permittee may include an evaluation of how the quality of the stormwater running onto the facility impacts the facility's stormwater discharges). The name of the nearest receiving waters, including intermittent streams, dry sloughs, arroyos and the areal extent and description of wetland sites that may receive discharges from the facility must also be included.

   c. Summary of Potential Pollutant Sources. The description of potential pollution sources culminates in a narrative assessment of the risk potential that sources of pollution pose to stormwater quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to stormwater. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., biochemical oxygen demand, suspended solids, etc.) associated with each source.

The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the date the SWPPP was prepared or amended. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.10 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

The listing should include a description of the causes of each spill or leak, the actions taken to respond to each release, and the actions taken to prevent similar such spills or leaks in the future. This effort will aid the facility operator as she or he examines existing spill prevention and response procedures and develops any additional procedures necessary to fulfill the requirements of the permit.

Any existing data on the quality or quantity of stormwater discharges from the facility must be summarized in the plan. These data may be useful for locating areas that have contributed pollutants to stormwater. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map.

d. Stormwater Controls. Following completion of the source identification and assessment phase, the permit requires the permittee to evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in stormwater runoff.

Source reduction measures include, among others, preventive maintenance, chemical substitution, spill prevention, good housekeeping, training, and proper materials management. Where such practices are not appropriate to a particular source or do not effectively reduce pollutant discharges, DEQ supports the use of source control measures and BMPs such as material segregation or covering, water diversion, and dust control. Like source reduction measures, source control measures and BMPs are intended to keep pollutants out of stormwater. The remaining classes of BMPs, which involve recycling or treatment of stormwater, allow the reuse of stormwater or attempt to lower pollutant concentrations prior to discharge.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address one or more of the potential pollution sources identified in the plan. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential stormwater contamination problems. The permit requirements included for the various industry sectors in the permit generally require that the portion of the plan that describes the measures and controls address the following minimum components.

When "minimize/reduce" is used relative to pollution prevention plan measures, it means to consider and implement best management practices that will result in an improvement over the baseline conditions as it relates to the levels of pollutants identified in stormwater discharges with due consideration to economic feasibility and effectiveness.

The permit includes the following non-numeric technology-based control measures to be implemented, unless it can be demonstrated and documented that such controls are not relevant to the discharges:

(1) Good Housekeeping. Good housekeeping involves using practical, cost-effective methods to identify ways to maintain a clean and orderly facility and keep contaminants out of separate storm sewers. It includes establishing protocols to reduce the possibility of mishandling chemicals or equipment and training employees in good housekeeping techniques. These protocols must be described in the plan and communicated to appropriate plant personnel.

(2) Eliminating and Minimizing Exposure. Eliminating exposure of all industrial activities to precipitation may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9VAC25-31-120 E, thereby eliminating the need to have a permit. Where practicable,

industrial materials and activities should be protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, or run-off.

(3) Preventive Maintenance. Permittees must develop a preventive maintenance program that involves regular inspection and maintenance of stormwater management devices and other equipment and systems. The program description should identify the devices, equipment, and systems that will be inspected; provide a schedule for inspections and tests; and address appropriate adjustment, cleaning, repair, or replacement of devices, equipment, and systems. For stormwater management devices such as catch basins and oil/water separators, the preventive maintenance program should provide for periodic removal of debris to ensure that the devices are operating efficiently. For other equipment and systems, the program should reveal and enable the correction of conditions that could cause breakdowns or failures that may result in the release of pollutants.

(4) Spill Prevention and Response Procedures. Based on an assessment of possible spill scenarios, permittees must specify appropriate material handling procedures, storage requirements, containment or diversion equipment, and spill cleanup procedures that will minimize the potential for spills and in the event of a spill enable proper and timely response. Areas and activities that typically pose a high risk for spills include loading and unloading areas, storage areas, process activities, and waste disposal activities. These activities and areas, and their accompanying drainage points, must be described in the plan. For a spill prevention and response program to be effective, employees should clearly understand the proper procedures and requirements and have the equipment necessary to respond to spills.

(5) Salt Storage Piles or Piles Containing Salt. Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation. The permittee must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles are to be located on an impervious surface. All runoff from the pile, and runoff that comes in contact with salt, including under drain systems, must be collected and contained within a bermed basin lined with concrete or other impermeable materials, or within an underground storage tank or tanks, or within an above ground storage tank or tanks, or disposed of through a sanitary sewer (with the permission of the owner of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated stormwater be allowed to discharge directly to the ground or to surface waters.

(6) Employee Training. Annual training must be provided to for all employees who work in areas where industrial materials or activities are exposed to stormwater, and for employees who are responsible for implementing activities identified in the SWPPP. The training must cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, control measure operation and maintenance, etc. The SWPPP shall include a summary of any training performed.

Although training is required annually, more frequent training may be necessary at facilities with high turnover of employees or where employee participation is essential to the effective implementation of the facility's SWPPP.

(7) Sediment and Erosion Control. The SWPPP must identify areas that, due to topography, activities, soils, cover materials, or other factors have a high potential for significant soil erosion. The plan must identify measures that will be implemented to limit erosion in these areas.

(8) Management of Runoff. The plan must contain a narrative evaluation of the appropriateness of traditional stormwater management practices (i.e., practices other than those that control pollutant sources) that divert, infiltrate, reuse, or otherwise manage stormwater runoff so as to reduce the discharge of pollutants. Appropriate measures may include, among others, vegetative swales, collection and reuse of stormwater, inlet controls, snow management, infiltration devices, and wet detention/retention basins.

Based on the results of the evaluation, the plan must identify practices that the permittee determines are reasonable and appropriate for the facility. The plan also should describe the

particular pollutant source area or activity to be controlled by each stormwater management practice. Reasonable and appropriate practices must be implemented and maintained according to the provisions prescribed in the plan.

In selecting stormwater management measures, it is important to consider the potential effects of each method on other water resources, such as ground water. Although SWPPPs primarily focus on stormwater management, facilities must also consider potential ground water pollution problems and take appropriate steps to avoid adversely impacting ground water quality. For example, if the water table is unusually high in an area, an infiltration pond may contaminate a ground water source unless special preventive measures are taken.

(9) Dust suppression and vehicle tracking of industrial materials. Control measures to minimize the generation of dust and off-site tracking of raw, final, or waste materials must be implemented. Stormwater collected on-site may be used for the purposes of dust suppression or for spraying stockpiles. Potable water, well water, and uncontaminated reuse water may also be used for this purpose. However, no direct discharge to surface waters from dust suppression activities or as a result of spraying stockpiles is authorized.

(10) Airport deicing operations. For facilities engaged in deicing or anti-icing activities, the permittee is required to minimize, and where practicable eliminate, the use of deicing or anti-icing chemicals in order to reduce the aggregate amount of deicing or anti-icing chemicals used and lessen the environmental impact.

The permittee is required to minimize contamination of stormwater runoff from aircraft deicing and anti-icing operations and runway deicing operations, if applicable. Where deicing and anti-icing operations occur, the SWPPP should include a description of the procedures and control measures used to manage contaminated stormwater runoff or snow melt (from areas used to dispose contaminated snow) to minimize the amount of pollutants discharged from the site.

The following control measure options (or their equivalents) are to be considered: covering storm sewer inlets, using booms, installing absorptive interceptors in the drain, establishing a dedicated deicing facility with a runoff collection and recovery system; using vacuum or collection trucks; storing contaminated stormwater water or deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works (with their permission); collecting contaminated runoff in a wet pond for biochemical decomposition; and directing runoff into vegetative swales or other infiltration measures.

Procedures and selected control measures should at all times be consistent with considerations of flight safety.

e. Routine facility inspections. Staff who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and who can also evaluate the effectiveness of control measures are to regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater, areas where spills or leaks have occurred in the past three years, discharge points, and control measures. At least one member of the pollution prevention team is to participate in the routine facility inspections.

The inspection frequency is to be at a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the department for less frequent intervals. The frequency is to be specified in the SWPPP. Inspections are to be performed during operating hours. At least once each calendar year, the routine facility inspection is to be conducted during a period when a stormwater discharge is occurring.

The requirement for routine facility inspections is waived for facilities that have maintained an active VEEP E3/E4 status. Certain sectors in Part IV have additional inspection requirements. If the VEEP E3/E4 waiver language is not included for the sector specific inspections, these additional inspection requirements may not be waived.

Any deficiencies in the implementation of the SWPPP that are found are to be corrected as soon as practicable, but not later than within 60 days of the inspection, unless permission for a later date is granted in writing by the director.

The results of the inspections shall be documented in the SWPPP and shall include at a minimum, the inspection date, the names of the inspectors, weather information and a description of any discharges occurring at the time of the inspection, any previously unidentified discharges of pollutants from the site, any control measures needing maintenance or repairs, any failed control measures that need replacement, any incidents of noncompliance observed, and any additional control measures needed to comply with the permit requirements.

2. Maintenance. The SWPPP must include a description of procedures and a regular schedule for preventative maintenance of all control measures, including back-up practices should a runoff event occur while control measures are offline.

   The permittee must maintain all BMPs identified in the plan in effective operating condition. If the facility site inspections identify BMPs that are not operating effectively, the permittee must perform maintenance before the next anticipated storm event or, if not possible, schedule maintenance as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. In the case of non-structural BMPs, the effectiveness of the BMP must be maintained by appropriate means, such as spill response supplies available and personnel trained, etc.

3. Non-stormwater Discharges.

   a. Discharges of certain sources of non-stormwater are allowable discharges under this permit. All other non-stormwater discharges are not authorized and must be either eliminated or covered under a separate VPDES permit.

   b. Annual outfall evaluation for unauthorized discharges. The permit requires that discharges from the site be tested or evaluated annually for the presence of non-stormwater discharges. The evaluation documentation must include the date of the evaluation, a description of the evaluation criteria used, a list of the outfalls or on-site drainage points that were directly observed during the evaluation, a description of the results of the evaluation for the presence of unauthorized discharges, and the actions taken to eliminate unauthorized discharges if any were identified. Evaluation techniques may include dye tests, television surveillance, observation of outfalls or other appropriate locations during dry weather, water balance calculations, and analysis of piping and drainage schematics.

      The permit also allows the permittee to request in writing to the Department that the facility be allowed to conduct annual outfall evaluations at 20% of the outfalls. If approved, the permittee must evaluate at least 20% of the facility outfalls each year on a rotating basis such that all facility outfalls will be evaluated during the period of coverage under this permit.

4. Signature and SWPPP Review.

   a. Signature and location. The SWPPP, including revisions to document corrective actions taken, is to be signed in accordance with Part II K, dated, and retained onsite (hard copy or electronic) at the facility covered by this permit. All other changes in documentation are to be signed and dated by the individual preparing the documentation. For inactive/unstaffed sites, the plan may be kept at the nearest office of the permittee.

   b. Availability. A copy of the SWPPP is to be retained onsite (hard copy or electron) and be immediately available at the time of an on-site inspection or upon request from DEQ, EPA, or the operator of an MS4 that receives discharges from the site.

   c. Required modifications. The SWPPP must be modified when necessary to address correction actions required by Part I A 6 a (Data exceeding benchmark concentration values) or Part I A 6 b (Corrective actions) and meet the associated deadlines. The SWPPP must also be modified, if required, within 60 days of receipt of a notification from the director that the SWPPP, control measures, or other components of the facility's stormwater program do not meet one or more of the requirements of the permit.

5. Maintaining an updated SWPPP. The permittee is required to review and amend the SWPPP as appropriate whenever: there is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility; routine inspections or compliance evaluations determine that there are deficiencies in the control measures, including BMPs; inspections by local, state, or federal officials determine that modifications to

the SWPPP are necessary; there is a significant spill, leak, or other release at the facility; there is an unauthorized discharge from the facility; or, the department notifies the permittee that a TMDL has been developed and applies to the permitted facility, consistent with Part I B.

SWPPP modifications are to be made as noted under Signature and SWPPP Review above. If a modification is based on a significant spill, leak, release, or unauthorized discharge, the SWPPP must include a description and date of the incident, the circumstances leading to the incident, actions taken in response to the incident, and measures to prevent the recurrence of such releases. Unauthorized discharges are subject to the reporting requirements of Part II G of this general permit.

Part IV – Sector-Specific Permit Requirements

The permittee must only comply with the additional requirements of Part IV (9VAC25-151-85 et seq.) that apply to the sectors of industrial activity located at the facility. These sector specific requirements are in addition to the requirements specified in Parts I, II and III of this permit. All numeric effluent limitations and benchmark monitoring concentration values reflect two significant digits, unless otherwise noted.

The following is a discussion of the history of the numeric effluent limitations and/or benchmarks for each Sector. Current benchmark values and numeric effluent limitations are noted in Tables 3 and 4 above.

Sector A – Timber Products

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities generally classified under Standard Industrial Classification (SIC) Codes 2491 and 2499 that are engaged in the following activities: cutting timber and pulpwood (those that have log storage or handling areas), mills, including merchant, lath, shingle, cooperage stock, planing, plywood and veneer, and producing lumber and wood materials; wood preserving, manufacturing wood buildings or mobile homes; and manufacturing finished articles made entirely of wood or related materials, except for wood kitchen cabinet manufacturers (SIC Code 2434), and mulch, wood, and bark facilities, including mulch dyeing operations (SIC Code 24991303).

Numeric Effluent Limitations:

SIC 2411 (Wet Decking Discharges at Log Storage and Handling Facilities)

The 2004 permit included numeric effluent limitations for pH and woody debris based on 40 CFR Part 429, Subpart I. These limitations have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Benchmark Monitoring Parameters:

SIC 2421 (General Sawmills and Planing Mills)

The 2004 permit included TSS and zinc benchmarks. The zinc benchmark was removed in the 2009 permit and the TSS benchmark has been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 2491 (Wood Preserving Facilities)

The 2004 permit included arsenic, chromium, and copper benchmarks. A footnote was added in the 2009 permit indicating that monitoring for these metals is not required for wood preserving facilities using only oil-based preservatives. These benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 2411 (Log Storage and Handling Facilities)

The 2004 permit included a TSS benchmark that has been carried forward through the 2009, 2014, 2019 and 2024 permits.

SICs 2426, 2429, 2431-2439 (except 2434), 2448, 2449, 2451, 2452, 2493, and 2499 (Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood and Structural Wood; Wood Containers; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified)

The 2004 permit included a TSS benchmark that has been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 24991303 (Mulch Wood, and Bark Facilities)

This subcategory was added in the 2014 permit and included TSS and BOD5 benchmarks. The 2019 permit replaced the BOD benchmark with a COD benchmark which has been carried forward to the 2024 permit. The TSS benchmark has been carried forward through the 2019 and 2024 permits.

SIC 24991303 (Facilities with Mulch Dyeing/Coloring Operations

This subcategory was added in the 2014 permit and applies only to those outfalls from the facility that collect runoff from areas where mulch dyeing/coloring activities occur, including but not limited to areas where loading, transporting, and storage of dyed/colored mulch occurs.

The following benchmarks were included in the 2014 permit: TSS, BOD5, COD, aluminum, arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, zinc, total nitrogen, and total phosphorus.

A footnote was also included in the 2014 permit indicating that benchmark monitoring waivers are available to facilities utilizing mulch dye or colorant products that do not contain the specified parameters provided that: (i) monitoring from samples collected during one monitoring period demonstrates that the specific parameter in question is below the quantitation level; (ii) a waiver request is submitted to and approved by the board. The laboratory certificate of analysis must be submitted with the request. If approved, documentation of this shall be kept with the SWPPP; and (iii) a certification statement is submitted to the department annually that the facility does not use mulch dyeing products that contain any of the specifically waived parameters.

Benchmarks for lead, manganese, mercury, and nickel were removed in the 2019 permit. The iron benchmark was removed in the 2024 permit due to lack of acute toxicity. All other benchmark parameters have been carried forward to the 2024 permit.

Sector B – Paper and Allied Products Manufacturing

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities generally classified as paperboard mills, SIC Code 2631.

Numeric Effluent Limitations: None.

Benchmarks Monitoring Parameters:

The 2004 permit included a BOD benchmark that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector C – Chemical and Allied Products Manufacturing

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities engaged in manufacturing the following products: Industrial inorganic chemicals (including SIC Codes 2812-2819); Plastic materials and synthetic resins, synthetic rubbers, and cellulosic and other synthetic fibers, except glass (including SIC Codes 2821-2824); Soap and other detergents, including facilities producing glycerin from vegetable and animal fats and oils; specialty cleaning, polishing, and sanitation preparations; surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; and perfumes, cosmetics, and other toilet preparations (including SIC Codes 2841-2844); Nitrogenous and phosphatic basic fertilizers, mixed fertilizer, pesticides, and other agricultural chemicals (SIC Codes 2873-2879). Composting Facilities (SIC Code 2875) are included.

Numeric Effluent Limitations:

SIC 2874 (Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR 418.10)

These numeric effluent limitations apply to precipitation runoff that, during manufacturing or processing, comes into contact with any raw materials, intermediate product, finished product, by-products or waste product.

The 2004 permit included numeric effluent limitations for total phosphorus and fluoride based on 40 CFR Part 418 Subpart A. These limitations have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Benchmark Monitoring Parameters:

2873-2879 (Agricultural Chemicals)

The 2004 permit included nitrogen, iron, zinc, and phosphorus benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

2812-2819 (Industrial Inorganic Chemicals)

The 2004 permit included aluminum, iron, and nitrogen benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

2841-2844 (Soaps, Detergents, Cosmetics, and Perfumes)

The 2024 permit included nitrogen and zinc benchmarks that have been carried forward through the 2009, 2014, 2019 and 2024 permits.

2821-2824 (Plastics, Synthetics, and Resins)

The 2004 permit included a zinc benchmark that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

2875 (Composting Facilities)

This subcategory was added in the 2014 permit and includes benchmarks for TSS, BOD_5, COD, ammonia, nitrogen, and phosphorus. These benchmarks have been carried forward through the 2019 and 2024 permits.

Sector D – Asphalt Paving and Roofing Materials and Lubricant Manufacturers

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities engaged in the following activities: manufacturing asphalt paving and roofing materials, including those facilities commonly identified by SIC Codes 2951 and 2952; portable asphalt plants (also commonly identified by SIC Code 2951); and manufacturing miscellaneous products of petroleum and coal, including those facilities classified as SIC Code 2992 and 2999.

Numeric Effluent Limitations:

SIC 2951, 2952 (Asphalt Paving and Roofing Materials)

These numeric effluent limitations apply to discharges from areas where production of asphalt paving and roofing emulsions occur.

The 2004 permit included numeric effluent limitations for TSS, oil and grease, and pH based on 40 CFR Part 443 Subpart A which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Benchmark Monitoring Parameters:

SIC 2951, 2952 (Asphalt Paving and Roofing Materials)

The 2004 permit included a benchmark for TSS that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

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

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities generally classified under SIC Codes 3251-3259, 3261-3269, 3274, and 3275 that are engaged in either manufacturing the following products or performing the following activities: structural clay products including tile and brick; pottery and porcelain electrical supplies; and concrete, plaster, and gypsum products.

Concrete block and brick facilities (SIC Code 3271), concrete products facilities, except block and brick (SIC Code 3272), and ready-mixed concrete facilities (SIC Code 3273) are not covered by this permit.

Numeric Effluent Limitations:

Cement Manufacturing Facility, Material Storage Runoff

These numeric effluent limitations apply to any discharge composed of runoff that derives from the storage of materials including raw materials, intermediate products, finished products, and waste materials that are used in or derived from the manufacture of cement.

The 2004 permit included numeric effluent limitations for TSS and pH based on 40 CFR Part 411 Subpart C which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Benchmark Monitoring Parameters:

SIC 3251-3259, 3261-3269 (Clay Product Manufacturers)

The 2004 permit included a benchmark for aluminum that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

3271-3275 - Lime and Gypsum Product Manufacturers

The 2004 permit included benchmarks for TSS, pH, and iron. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector F – Primary Metals

The requirements listed under this section apply to stormwater discharges associated with industrial activity from the following types of facilities in the primary metal industry. Steel works, blast furnaces, and rolling and finishing mills, including steel wire drawing and steel nails and spikes; cold-rolled steel sheet, strip, and bars; and steel pipes and tubes (SIC Codes 3312-3317). Iron and steel foundries, including gray and ductile iron, malleable iron, steel investment, and steel foundries not elsewhere classified (SIC Codes 3321-3325). Rolling, drawing, and extruding of nonferrous metals, including rolling, drawing, and extruding of copper; rolling, drawing and extruding of nonferrous metals except copper and aluminum; and drawing and insulating of nonferrous wire (SIC Codes 3351-3357). Nonferrous foundries (castings), including aluminum die-castings, nonferrous die-castings, except aluminum, aluminum foundries, copper foundries, and nonferrous foundries, except copper and aluminum (SIC Codes 3363-3369).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3312-3317 (Steel Works, Blast Furnaces, and Rolling and Finishing Mills)

The 2004 permit included aluminum and zinc benchmarks which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

SIC 3321-3325 (Iron and Steel Foundries)

The 2004 permit included aluminum, TSS, copper, iron, and zinc benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 3351-3357 (Rolling, Drawing, and Extruding of Nonferrous Metals)

The 2004 permit included copper and zinc benchmarks which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

SIC 3363-3369 (Nonferrous Foundries)

The 2004 permit included copper and zinc benchmarks which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector G – Metal Mining (Ore Mining and Dressing)

The requirements listed under this section apply to stormwater discharges associated with industrial activity from active, temporarily inactive and inactive metal mining and ore dressing facilities including mines abandoned on federal lands, as classified under SIC Major Group 10. Coverage is required for facilities that discharge stormwater that has come into contact with, or is contaminated by, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation. SIC Major Group 10 includes establishments primarily engaged in mining of ores, developing mines, or exploring for metallic minerals (ores) and also includes ore dressing and beneficiating operations, whether performed at colocated, dedicated mills or at separate mills (e.g., custom mills).

Stormwater discharges from active metal mining facilities that are subject to the effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440) are not authorized by this permit.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 1021 (Active Copper Ore Mining and Dressing Facilities)

The 2004 permit included an aluminum benchmark which has been carried forward through the 2009, 2014, 2019, and 2024 permits.

SIC 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1099 (Iron Ores, Copper Ores, Lead and Zinc Ores, Gold and Silver Ores, Ferroalloy Ores except Vanadium, Miscellaneous Metal Ores.)

These benchmarks apply to discharges from waste rock and overburden piles from active ore mining and dressing facilities.

The 2004 permit included benchmarks for TSS, turbidity, pH, hardness (monitoring only), antimony, arsenic, beryllium, cadmium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, and zinc. The manganese benchmark was removed in the 2009 permit and the iron benchmark was removed in the 2024 permit. All other benchmarks have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Additional monitoring requirements (no benchmarks) for were also included in the 2004 permit for various metals deemed “pollutants of concern”. Iron was removed as a pollutant of concern in the 2024 permit.

Sector H – Coal Mines and Coal Mining-Related Facilities

The requirements listed under this section apply to stormwater discharges associated with industrial activity from coal mining-related areas (SIC Major Group 12) if (i) they are not subject to effluent limitations guidelines under 40 CFR Part 434 or (ii) they are not subject to the standards of the Surface Mining Control and Reclamation Act of 1977 (SMCRA) (30 USC § 1201 et seq.) and the Virginia Department of Mines, Minerals and Energy's individual permit requirements.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 1221-1241 (Coal Mines and Related Areas)

The 2004 permit included aluminum, iron and TSS benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector I (Repealed) – Oil and Gas Extraction and Refining

During the 2019 reissuance, SIC codes associated with Sector I (Major Group 13, 2911) were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from oil and gas extraction and refining facilities listed under SIC Major Group 13 which have had a discharge of a reportable quantity (RQ) of oil or a hazardous substance for which notification is required under 40 CFR 110.6, 40 CFR 117.21 or 40 CFR 302.6 . These include oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with any overburden raw material, intermediate products, finished products, by-products or waste products located on the site of such operations. Industries in SIC Major Group 13 include the extraction and production of crude oil, natural gas, oil sands and shale; the production of hydrocarbon liquids and natural gas from coal; and associated oilfield service, supply and repair industries. This section also covers petroleum refineries listed under SIC Code 2911.

Contaminated stormwater discharges from petroleum refining or drilling operations that are subject to nationally established BAT or BPT guidelines found at 40 CFR Part 419 and 40 CFR Part 435 respectively are not authorized by this permit. Note: most contaminated discharges from petroleum refining and drilling facilities are subject to these effluent guidelines and are not eligible for coverage under this permit.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None

Sector J – Mineral Mining and Dressing Facilities

SIC Codes 1411-1499 are not authorized under this permit. See 9VAC25-190 Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining.

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

The requirements listed under this section apply to 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 the Resource Conservation and Recovery Act (RCRA) (Industrial Activity Code "HZ"). Disposal facilities that have been properly closed and capped, or clean closed, and have no significant materials exposed to stormwater, do not require this permit.

Numeric Effluent Limitations:

Industrial Activity Code “HZ” (Hazardous Waste Treatment, Storage, or Disposal Facilities)

These numeric effluent limitations apply to contaminated stormwater discharges from hazardous waste landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265 (Subpart N), with some exceptions noted in the permit.

The 2004 permit included numeric effluent limitations for BOD, TSS, ammonia, alpha terpineol, aniline, benzoic acid, naphthalene, p-Cresol, phenol, pyridine, arsenic (Total), chromium (Total), zinc (Total), and pH based on 40 CFR Part 445 Subpart A. These limits have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Benchmark Monitoring Parameters:

Industrial Activity Code “HZ” (Hazardous Waste Treatment, Storage, or Disposal Facilities)

The 2004 permit included TKN, TSS, TOC, arsenic, cadmium, cyanide, lead, mercury, selenium, and silver benchmarks. A magnesium benchmark was added in the 2014 permit and is removed in the 2024 permit. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector L – Landfills, Land Application Sites and Open Dumps

The requirements listed under this section apply to stormwater discharges associated with industrial activity from waste disposal at landfills, land application sites, and open dumps that receive or have received industrial wastes (Industrial Activity Code "LF"), including sites subject to regulation under Subtitle D of the Resource Conservation and Recovery Act (RCRA). Landfills, land application sites, and open dumps that have stormwater discharges from other types of industrial activities such as vehicle maintenance, truck washing, and recycling may be subject to additional requirements specified elsewhere in this permit. This permit does not cover discharges from landfills that receive only municipal wastes.

Landfills (including landfills in "post-closure care") that have been properly closed and capped in accordance with 9VAC20-81-160 and 9VAC20-81-170 and have no significant materials exposed to stormwater do not require this permit. Landfills closed in accordance with regulations or permits in effect prior to December 21, 1988, do not require this permit, unless significant materials are exposed to stormwater.

Numeric Effluent Limitations:

Industrial Activity Code "LF" (Landfills, Land Application Sites and Open Dumps)

These numeric effluent limitations apply to contaminated stormwater discharges from municipal solid waste landfills (MSWLFs) that have not been closed in accordance with 40 CFR 258.60, and contaminated stormwater discharges from those landfills that are subject to the provisions of 40 CFR Part 257 (these include construction and debris landfills and industrial landfills), with some exceptions noted in the permit.

The 2004 permit included numeric effluent limitations for BOD, TSS, ammonia, alpha terpineol, benzoic acid, p-Cresol, phenol, zinc (Total), and pH based on 40 CFR Part 445 Subpart B. These limits have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Benchmark Monitoring Parameters:

Industrial Activity Code "LF" (Landfills, Land Application Sites and Open Dumps)

The 2004 permit included TSS and iron benchmarks. The TSS benchmark has been carried forward through the 2009, 2014, 2019, and 2024 permits.

The iron benchmark was removed in the 2014 permit based on a recommendation from the TAC. High iron concentrations are prevalent in the soils throughout Virginia, and it was determined that having these facilities continue to monitor for iron is no longer useful or necessary for this industrial sector. DEQ did an analysis of background metals concentrations in Virginia soils and compiled the data in the report "Background Metals Project", Adam Koling, DEQ, August 23, 2012. This report consolidated more than 30 years of background data for metals in Virginia soils and reported a statistical upper prediction limit (UPL) for each of 19 metals. Based on the high iron concentrations throughout Virginia, as verified by the report, it was decided to remove the iron benchmark monitoring for this sector.

Sector M – Automobile Scrap Yards

The requirements listed under this section apply to storm water discharges associated with industrial activity from facilities engaged in dismantling or wrecking used motor vehicles for parts recycling/resale and for scrap (SIC Code 5015).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 5015 (Automobile Salvage Yards)

The 2004 permit included TSS, aluminum, iron, and lead benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector N – Scrap Recycling and Waste Recycling Facilities and Material Recovery Facilities

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities typically identified as SIC code 5093 that are engaged in the processing, reclaiming and wholesale distribution of scrap and waste materials such as ferrous and nonferrous metals, paper, plastic, cardboard, glass, animal hides, and facilities that are engaged in reclaiming and recycling liquid wastes such as used oil, antifreeze, mineral spirits, and industrial solvents. Separate permit requirements have been established for recycling facilities that only receive source-separated recyclable materials primarily from nonindustrial and residential sources (e.g., common consumer products including paper, newspaper, glass, cardboard, plastic containers, aluminum and tin cans).

Separate permit requirements have also been established for facilities that are engaged in dismantling ships, marine salvaging, and marine wrecking–ships for scrap (SIC Code 4499, limited to those listed; for others in SIC Code 4499 not listed in this subsection, see Sector Q (9VAC25-151-240)).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 5093 (Scrap Recycling and Waste Recycling Facilities (nonsource-separated facilities only))

The 2004 permit included TSS, aluminum, cadmium, chromium, copper, iron, zinc, and lead benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 5093 (Scrap Recycling and Waste Recycling Facilities (source-separated facilities only))

The 2014 permit added TSS, aluminum, cadmium, chromium, copper, iron, zinc, and lead benchmarks for source-separated facilities. A footnote was also included stating “Metals monitoring is only required at source-separated facilities for the specific metals listed above that are received at the facility.” The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2019 and 2024 permits.

SIC 4499 (Facilities Engaged in Dismantling Ships, Marine Salvaging, and Marine Wrecking - Ships for Scrap)

The 2004 permit included a copper benchmark. The 2009 permit added TSS, aluminum, cadmium, chromium, iron, zinc, and lead benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector O – Steam Electric Generating Facilities

The requirements listed under this section apply to stormwater discharges associated with industrial activity from steam electric power generating facilities using coal, natural gas, oil, nuclear energy, etc. to produce a steam source, including coal handling areas (Industrial Activity Code "SE").

Stormwater discharges from coal pile runoff subject to numeric effluent limitations are eligible for coverage under this permit, but are subject to the limitations established by Part I A 1 c (2).

Stormwater discharges from ancillary facilities (e.g., fleet centers, gas turbine stations, and substations) that are not contiguous to a steam electric power generating facility are not covered by this permit. Heat capture and heat recovery combined cycle generation facilities are also not covered by this permit; however, dual fuel co-generation facilities that generate electric power are included.

Numeric Effluent Limitations:

Industrial Activity Code “SE” (Steam Electric Generating Facilities)

Permittees with point sources of coal pile runoff associated with steam electric power generation shall monitor these stormwater discharges for the presence of TSS and for pH in accordance with Part I A 1 c (2) of the permit (based on 40 CFR Part 423).

Benchmark Monitoring Parameters:

Industrial Activity Code “SE” (Steam Electric Generating Facilities)

The 2004 permit included an iron benchmark that was carried through the 2009, 2014, and 2019 permits. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. There are currently no benchmark requirements for this sector.

Sector P (Repealed) – Land Transportation and Warehousing

During the 2019 reissuance the SIC codes associated with Sector P were transferred to Sector AF (Facilities Limited to Total Suspended Solids Benchmark Monitoring). The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from ground transportation facilities and rail transportation facilities (generally identified by SIC Codes 40, 41, 42, 43, and 5171), that have vehicle and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling and lubrication) or equipment cleaning operations. Also covered under this section are facilities found under SIC Codes 4221 through 4225 (public warehousing and storage) that do not have vehicle and equipment maintenance shops or equipment cleaning operations.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 4011, 4013, 4111-4173, 4212-4231, 4311, and 5171 - Land Transportation and Warehousing Facilities

The 2009 permit included TPH and TSS benchmarks which were carried through the 2014 permit. Data collected during the 2014 permit term indicated a benchmark exceedance rate for TPH of 0.6% and the TPH benchmark was removed in the 2019 permit. Given that the sector was left with only a TSS benchmark, the sector was repealed in the 2019 permit and the associated SIC codes were moved to Sector AF.

Sector Q – Water Transportation and Ship and Boat Building and Repairing Yards

The requirements listed under this section apply to stormwater discharges associated with the following industrial activities:

1. Water transportation facilities identified by SIC Codes 4412-4499 (except SIC Code 4499 facilities as specified in Sector N - 9VAC25-151-210). The water transportation industry includes facilities engaged in foreign or domestic transport of freight or passengers in deep sea or inland waters, marine cargo handling operations, ferry operations, towing and tugboat services, and marinas.
2. Ship building and repairing and boat building and repairing facilities identified by SIC Codes 3731 and 3732. The U.S. Coast Guard refers to a vessel 65 feet or greater in length as a "ship" and a vessel smaller than 65 feet as a "boat."

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 4412-4499, except 4499 as specified in Sector N (Water Transportation Facilities); SIC 3731-3732 (Ship and Boat Building or Repairing Yards)

The 2004 permit included aluminum, iron, and zinc benchmarks. The aluminum and iron benchmarks were removed in the 2014 permit and TSS and copper benchmarks were added. This was done to align the benchmarks between Sector Q and Sector R which have nearly identical stormwater discharge characteristics. In the 2019 permit, Sector R was consolidated into Sector Q. All remaining benchmarks have been carried forward in the 2024 permit.

Sector R (Repealed) – Ship and Boat Building or Repair Yards

During the 2019 reissuance Sector R was combined with Sector Q given that the benchmarks and sector-specific language was essentially identical. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from ship building and repairing and boat building and repairing facilities identified by SIC Codes 3731 and 3732. The U.S. Coast Guard refers to a vessel 65 feet or greater in length as a "ship" and a vessel smaller than 65 feet as a "boat."

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3731-3732 (Ship and Boat Building or Repairing Yards)

The 2009 permit included a TSS benchmark. The 2014 permit added copper and zinc benchmarks. In the 2019 permit, Sector R was consolidated into Sector Q (same benchmarks) and Sector R was repealed.

Sector S (Repealed) – Air Transportation Facilities

During the 2019 reissuance authorization for coverage of discharges subject to effluent limitations in 40 CFR Part 449 was removed as it was determined at the time that such facilities should be covered under Individual VPDES Permits. Benchmarks were also removed due to low exceedance rates. Given that Sector S no longer had any benchmark monitoring requirements or numeric effluent limitations, the sector was repealed and the Air Transportation Facility SIC codes were grouped into Sector AE (Facilities with no analytical benchmark monitoring requirements). The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from air transportation facilities including airports, airport terminal services, air transportation (scheduled and nonscheduled), flying fields, air courier services, and establishments engaged in operating and maintaining airports, and servicing, repairing or maintaining aircraft (generally classified under SIC Code 45), which have vehicle maintenance shops, material handling facilities, equipment cleaning operations, or airport or aircraft deicing or anti-icing operations. For the purpose of this section, the term "deicing" is defined as the process to remove frost, snow, or ice and "anti-icing" is the process which prevents the accumulation of frost, snow, or ice. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or deicing or anti-icing operations are addressed under this section.

Numeric Effluent Limitations:

SIC 4512-4581 (Air Transportation Facilities)

The 2014 permit included the following numeric effluent limitations:

1. Existing primary airports and primary airports meeting the definition of a new source (new primary airports) with at least 1,000 annual jet departures (non-propeller aircraft) that discharge wastewater associated with airport pavement deicing comingled with stormwater shall either use deicing products that do not contain urea or, alternatively, airfield pavement discharges at every discharge point shall achieve the numeric limitations for ammonia (14.7 mg/L, per 40 CFR 449) prior to any dilution or commingling with any non-deicing discharge. Primary airports that only use deicing products that do not contain urea shall certify this fact annually to the department.
2. Airports meeting the definition of a new source (new airports) with 10,000 annual departures, and located in cold climate zones, shall collect at least 60% of available Aircraft Deicing Fluid (ADF) after deicing. New airports shall achieve the performance standards for COD (271 mg/L daily max; 154 mg/L weekly average, per 40 CFR 449) in the available ADF collected.

The 2019 permit removed authorization for coverage of discharges subject to effluent limitations in 40 CFR Part 449 as it was determined at the time that such facilities should be covered under Individual VPDES Permits. However, during the 2019 permit term a handful of such airports were covered under Sector AD (Nonclassified Facilities/Stormwater Discharges Designated By the Department As Requiring Permits) in order to avoid the additional cost and administrative burden of an Individual Permit. The use of Sector AD allowed coverage of these airports at the department's discretion and allowed for the inclusion of the ELG requirements (40 CFR 449) and any other benchmarks deemed necessary.

The 2024 permit clarifies that facilities subject to federal effluent guidelines at 40 CFR 449 may be covered under Sector AD.

Benchmark Monitoring Parameters:

SIC 4512-4581 (Air Transportation Facilities)

The 2004 permit included BOD, TKN, and pH benchmarks for facilities that used more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average

annual basis. The 2009 permit added COD and TSS benchmarks. During the 2009 permit term, no DMR data was collected for these parameters, indicating that no facility exceeded the deicing/anti-icing thresholds noted above. As a result, these deicing/anti-icing benchmarks were removed during the 2014 reissuance, but TSS and TPH benchmarks were added for discharges from vehicle maintenance and equipment cleaning areas.

Data collected during the 2014 permit term indicated a benchmark exceedance rate of 4% for TSS and 0% for TPH. These benchmarks were removed during the 2019 reissuance.

Given that Sector S no longer had any benchmark monitoring requirements (or numeric effluent limitations as noted above), the sector was repealed and the Air Transportation Facility SIC codes were grouped into Sector AE (Facilities with no analytical benchmark monitoring requirements).

The 2024 continues to cover Air Transportation Facilities not subject to federal effluent guidelines under Sector AE.

Sector T (Repealed) – Treatment Works

During the 2019 reissuance, the Industrial Activity Code "TW" was transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from 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 lands 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 9VAC25-31-730 (Industrial Activity Code "TW"). Farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and that are not physically located within the facility, or areas that are in compliance with § 405 of the CWA are not required to have permit coverage.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector U – Food and Kindred Products

The requirements listed under this section apply to stormwater discharges associated with industrial activity from food and kindred products processing facilities, including dairy products SIC Codes 2021 2026; grain mill products SIC Codes 2041 2048; and fats and oils SIC Codes 2074 2079.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 2021-2026 (Dairy Products)

The 2009 permit included BOD and TSS benchmarks that have been carried forward through the 2014, 2019, and 2024 permits.

SIC 2041-2048 (Grain Mill Products)

The 2004 permit included TKN and TSS benchmarks that have been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 2074-2079 (Fats and Oils Products)

The 2004 permit included BOD, TN, and TSS benchmarks that have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector V (Repealed) – Textile Mills, Apparel, and Other Fabric Products

During the 2019 reissuance, the SIC codes associated with Sector V were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from textile mills, apparel and other fabric product manufacturing, generally described by SIC 22 and 23. This section also covers facilities engaged in manufacturing finished leather and artificial leather products (SIC 31, except 3111). Facilities in this sector are primarily engaged in the following activities: textile mill products, of and regarding facilities and establishments engaged in the preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage, the manufacturing of broad woven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn; processes involved in the dyeing and finishing of fibers, yarn fabrics, and knit apparel; the integrated manufacturing of knit apparel and other finished articles of yarn; the manufacturing of felt goods (wool), lace goods, nonwoven fabrics, miscellaneous textiles, and other apparel products.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector W (Repealed) – Furniture and Fixtures

During the 2019 reissuance, the SIC codes associated with Sector W were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities involved in the manufacturing of wood kitchen cabinets (generally described by SIC Code 2434), and furniture and fixtures (generally classified under SIC Major Group 25), including: household furniture (SIC 251); office furniture (SIC 252); public buildings and related furniture (SIC 253); partitions, 2014 Reissuance 97 Final Stage – As Adopted 12-17-2013 shelving, lockers, and office and store fixtures (SIC 254); and miscellaneous furniture and fixtures (SIC 259).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector X (Repealed) – Printing and Publishing

During the 2019 reissuance, the SIC codes associated with Sector X were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from printing and publishing facilities (generally classified under SIC Major Group 27), and include the following types of facilities: newspaper, periodical, and book publishing and printing (SIC Codes 271 through 273); miscellaneous publishing (SIC Code 274); commercial printing (SIC Code 275); manifold business forms, greeting cards, bankbooks, looseleaf binders and book binding and related work (SIC Codes 276 through 278); and service industries for the printing trade (SIC 279).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

The requirements listed under this section apply to stormwater discharges associated with industrial activity from rubber and miscellaneous plastic products manufacturing facilities, SIC Codes 3011, 3021, 3052, 3053, 3061, and 3069.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3011, 3021, 3052, 3053, 3061, and 3069 (Tires and Inner Tubes; Rubber Footwear; Gaskets, Packing and Sealing Devices; Rubber Hose and Belting; and Fabricated Rubber Products, Not Elsewhere Classified)

The 2004 permit included a zinc benchmark that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector Z (Repealed) – Leather Tanning and Finishing

During the 2019 reissuance, the SIC codes associated with Sector Z were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from leather tanning, currying and finishing (commonly identified by SIC Code 3111).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3111 (Leather Tanning and Fishing

The 2004 permit included a zinc benchmark that was carried forward through the 2009 and 2014 permits. During the 2019 reissuance it was noted that no data had been collected for this benchmark requirement because there were no facilities covered under this Sector in Virginia. The benchmark was removed for the 2019 permit and the associated SIC codes were moved to Sector AE.

Sector AA – Fabricated Metals Products

The requirements listed under this section apply to stormwater discharges associated with industrial activity from the following fabricated metals industries, except for electrical related industries: fabricated metal products, except machinery and transportation equipment, SIC Codes 3411-3471, 3479, and 3482-3499; and jewelry, silverware, and plated ware, SIC Codes 3911-3915

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3411-3471, 3482-3499, 3911-3915 (Fabricated Metal Products Except Coating)

The 2004 permit included aluminum, iron, and zinc benchmarks. The 2014 permit added a copper benchmark. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019, and 2024 permits.

SIC 3479 (Fabricated Metal Coating and Engraving)

The 2004 permit included a zinc benchmark that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector AB – Transportation Equipment, Industrial, or Commercial Machinery

The requirements listed under this section apply to stormwater discharges associated with industrial activity from transportation equipment and industrial or commercial machinery manufacturing facilities commonly described by SIC Codes 3511-3599, except SIC Codes 3571-3579.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3511-3599 except 3571-3579 (Transportation Equipment Manufacturing Facilities)

The 2014 permit included TPH, TSS, copper, and zinc benchmarks which have been carried forward through the 2019 and 2024 permits.

Sector AC (Repealed) – Electronic, Electrical Equipment and Components, Photographic and Optical Goods

During the 2019 reissuance, the SIC codes associated with Sector AC were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent

limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities that manufacture: electronic and other electrical equipment and components, except computer equipment (SIC Major Group 36); measuring, analyzing, and controlling instruments; photographic, medical and 2014 Reissuance 103 Final Stage – As Adopted 12-17-2013 optical goods; watches and clocks (SIC Major Group 38) and computer and office equipment (SIC Code 357).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector AD – Nonclassified Facilities or Stormwater Discharges Designated by the Department as Requiring Permits

Sector AD is used to provide permit coverage for facilities designated by the department as needing a stormwater permit under the provisions of 9VAC25-31-120 A 1 c or under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES Permit Regulation. Therefore, almost any type of stormwater discharge may be covered under this sector. Permittees shall be assigned to Sector AD by the department and may not choose Sector AD as the sector describing the facility's activities.

Effluent limitations, benchmark monitoring and reporting requirements: The department shall establish any additional monitoring requirements for your facility prior to before authorizing coverage under this permit.

Sector AE – Facilities with No Analytical Benchmark Monitoring Requirements

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities with SIC Codes 2611, 2621, 2652 2657, 2833 2836, 2851, 2861 2869, 2891 2899, 3952, 3211, 3221, 3229, 3231, 3241, 3281, 3291 3299, 3331 3339, 3398, 3399, 3341, 1311, 1321, 1381 1389, 2911, 4512-4581 (not subject to federal effluent guidelines), Treatment Works (TW), 2011 2015, 2032 2038, 2051 2053, 2061 2068, 2082 2087, 2091 2099, 2111 2141, 2211 2299, 2311 2399, 3131 3199, 2434, 2511 2599, 2711 2796, 3081 3089, 3931, 3942 3949, 3951 3955 (except 3952), 3961, 3965, 3991 3999, 3111, 3711 3799 (except 3731 and 3732 as identified in Sector Q), 3571 3579, 3612 3699, and 3812 3873.

No additional sector-specific requirements apply to this sector.

Sector AF – Facilities Limited to Total Suspended Solids Benchmark Monitoring

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities with SIC Codes 4011, 4013, 4111, 4173, 4212 4231, 4311, and 5171.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC codes 4011, 4013, 4111 4173, 4212 4231, 4311, and 5171

The 2019 permit included a TSS benchmark which has been carried forward through the 2024 permit.

Part V – Chesapeake Bay Total Maximum Daily Load Compliance

1. Chesapeake Bay TMDL Compliance.

EPA's Chesapeake Bay TMDL (December 29, 2010) includes wasteload allocations for VPDES permitted industrial stormwater facilities as part of the regulated stormwater aggregate load. EPA used data submitted by Virginia with the Phase I Chesapeake Bay TMDL Watershed Implementation Plan, including the number of industrial stormwater permits per county and the number of urban acres regulated by industrial stormwater permits, as part of their development of the aggregate load. Aggregate loads for industrial stormwater facilities were appropriate because actual facility loading data were not available to develop individual facility wasteload allocations.

Virginia estimated the loadings from industrial stormwater facilities using actual and estimated facility acreage information, and TP, TN, and TSS loading values from the Northern Virginia Planning District Commission (NVPDC) *Guidebook for Screening Urban Nonpoint Pollution Management Strategies,* prepared for the Metropolitan Washington Council of Governments. Annandale, VA. November, 1979. The loading values used were as follows:

TP - High (80%) imperviousness industrial; 1.5 lb/ac/yr
TN - High (80%) imperviousness industrial; 12.3 lb/ac/yr
TSS - High (80%) imperviousness industrial; 440 lb/ac/yr

Starting with the 2014 general permit, industrial stormwater facilities permitted within the Chesapeake Bay watershed have been required to provide actual facility area information and TP, TN and TSS monitoring data to quantify their nutrient and sediment loads in order to demonstrate compliance with the above Chesapeake Bay TMDL loading rates. In the event that a facility's calculated loads exceeded the TMDL loading rates, a Chesapeake Bay TMDL action plan was to be prepared indicating the means and methods (such as management practices and retrofit programs) that would be utilized to meet the required reductions and a schedule to achieve those reductions. These procedures were continued in the 2019 general permit and are continued in the 2024 general permit in a modified format in order to address the Chesapeake Bay TMDL compliance deadline of 2025.

Notably, the TSS loading rate requirements previously required under this section have been removed for the 2024 general permit. On August 12, 2019, the Chesapeake Bay Program Principals' Staff Committee (PSC) approved the process, timeline, and proposed Phase III WIP language for developing the Phase III WIP sediment targets. The Commonwealth of Virginia included the PSC-approved language in its final Phase III WIP on Page 29, Section 5.2 (Sediment Targets). This language states in part, "Sediment loads are managed in the Bay TMDL to specifically address the water clarity/submerged aquatic vegetation (SAV) water quality standards. Intuitively, it makes sense that the more sediment suspended in the water, the less makes it down to the SAV. Interestingly, research in the Chesapeake Bay has shown that the water clarity/SAV water quality standard is generally more responsive to nutrient load reductions than it is to reduction in sediment loads. This is because the algae that are fueled by the nutrients can block as much, or more, light from reaching the SAV as suspended sediments. *The sediment targets will not affect the BMPs called for in the WIP, and are not intended to be the driver for implementation moving forward*…"

Given that the Phase III WIP does not intend for sediment targets to be the driver for implementation moving forward, DEQ is reissuing this general permit without the TSS loading rate requirements. The reissued general permit will continue to include the required nutrient load reductions for nitrogen and phosphorous.

While the Commonwealth of Virginia has met the 2025 Sediment milestone target[1], it should be noted that the BMPs installed for the purposes of meeting the nutrient reductions will continue to provide additional sediment reductions as well, ensuring that the permit is consistent with the Chesapeake Bay TMDL.

The removal of the sediment reduction requirements for the Chesapeake Bay TMDL does not relieve permittees of their responsibility to comply with the requirements of a local TMDL or impaired water without an approved TMDL as addressed under Part I.A.1.c(3) and (4) of this permit, respectively. Additionally,

[1] Chesapeake Bay Program Communications Office Press Release, September 26, 2023: https://www.chesapeakebay.net/news/pressrelease/chesapeake-water-quality-sees-slight-decline

benchmarks and numeric effluent limitations for TSS continue to be applied on a sector-specific basis under Part IV of this permit.

Anti-backsliding: The Clean Water Act, section 303(d)(4)(A) allows the establishment of a less stringent effluent limitation when the receiving water has been identified as not meeting applicable water quality standards (i.e., a nonattainment water) if the permittee meets two conditions: 1) the existing effluent limitation must have been based on a total maximum daily load (TMDL) or other wasteload allocation (WLA) established under CWA section 303, and 2) relaxation of the effluent limitation is only allowed if attainment of water quality standards will be ensured.

The removal of the TSS loading rate requirements meets both criteria: 1) the limitation was based on a TMDL established under CWA section 303 and 2) the water quality standard for clarity/SAV will still be attained, as noted above.

The remaining Chesapeake Bay TMDL compliance requirements are separated into three distinct categories depending on the status of a facility's demonstration of compliance, as described below.

a. Facilities that obtained coverage under the 2019 industrial stormwater general permit that demonstrated compliance with the Chesapeake Bay TMDL loading rates.

   (1) Owners shall maintain documentation of their demonstration of compliance with the Chesapeake Bay TMDL loading rates with the SWPPP and shall continue implementing any BMPs that may have been developed as part of that demonstration. Documentation may include:

      (a) Calculations submitted to the department indicating that reductions were not necessary.

      (b) A completed TMDL Action Plan, including a description of the means and methods, such as management practices and retrofit programs that were utilized to meet the required reductions.

      (c) Other means accepted by the department indicating compliance with the Chesapeake Bay TMDL loading rates.

b. Facilities that obtained coverage under the 2019 industrial stormwater general permit that did *not* demonstrate compliance with the Chesapeake Bay TMDL loading rates shall submit a demonstration to the department.

   (1) Owners of facilities that submitted a Chesapeake Bay TMDL action plan during the 2019 industrial stormwater general permit term that did not achieve reductions by the end of the 2019 permit term shall update and resubmit their action plan to the department for approval no later than 60 days following coverage under this general permit. Permittees shall achieve ten percent of the remaining reductions by December 31, 2024, and all remaining reductions by December 31, 2025. An annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the interim and final reductions. A final report to demonstrate compliance shall be submitted to the department no later than January 10, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

      NOTE: Facilities that fall into this category are considered out of compliance with the previous permit which required reductions to be completed by June 30, 2024. To address this, the above language enacts an enforcement mechanism with interim and final milestones. However, given that the enforcement mechanism language allows additional time to perform activities required to be completed by the end of the previous permit term, anti-backsliding needs to be addressed.

      Anti-backsliding: The Clean Water Act, section 303(d)(4)(A) allows the establishment of a less stringent effluent limitation when the receiving water has been identified as not meeting applicable water quality standards (i.e., a nonattainment water) if the permittee meets two conditions: 1) the existing effluent limitation must have been based on a total maximum daily load (TMDL) or other wasteload allocation (WLA) established under CWA section 303, and 2) relaxation of the effluent limitation is only allowed if attainment of water quality standards will be ensured.

      The enactment of the enforcement mechanism language meets both criteria: 1) the reduction requirements were based on a TMDL established under CWA section 303 and 2) the enforcement mechanism language will ensure the attainment of water quality standards.

(2) Owners of facilities that completed four samples for each outfall for TN and TP during the 2019 industrial stormwater general permit term that did not submit calculations by the end of the 2019 permit term shall utilize the procedures in Part V D to calculate their facility stormwater loads. The permittee shall submit a copy of the calculations, and a Chesapeake Bay TMDL action plan if required under Part V E, no later than 60 days following coverage under this general permit to the DEQ regional office serving the area where the industrial facility is located on a form provided by the department. Reductions, if applicable, shall be achieved by December 31, 2025, and an annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the required reductions until such time that the demonstration is completed. The demonstration shall be submitted to the department no later than February 1, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

(3) Owners of facilities registered prior to July 1, 2022, that did not complete four samples for each outfall for TN and TP by the end of the 2019 industrial stormwater general permit term shall monitor their discharges for TN and TP to characterize the contributions from their facility's specific industrial sector for these parameters. Total nitrogen is the sum of total Kjeldahl nitrogen (TKN) and nitrite + nitrate and shall be derived from the results of those tests. After the facility is granted coverage under the permit, samples shall be collected during each of the first four quarters of permit coverage. Samples shall be collected and analyzed in accordance with Part V B. Monitoring results shall be reported in accordance with Part V C and Part II C, and retained in accordance with Part II B. Calculations utilizing the procedures in Part V D, and a Chesapeake Bay TMDL action plan if required under Part V E, shall be submitted no later than 60 days following the completion of the fourth sample to the DEQ regional office serving the area where the industrial facility is located on a form provided by the department. Reductions, if applicable, shall be achieved by December 31, 2025, and an annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the required reductions until such time that the demonstration is completed. The demonstration shall be submitted to the department no later than February 1, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

Facilities may use the applicable sampling data collected during the 2019 industrial stormwater general permit term to satisfy all or part of the four monitoring periods requirements.

(4) Owners of facilities registered after June 30, 2022, that did not complete four samples for each outfall for TN and TP by the end of the 2019 industrial stormwater general permit term shall monitor their discharges in accordance with Part V A 3 (section c. of this fact sheet section).

Facilities may use the applicable sampling data collected during the 2019 industrial stormwater general permit term to satisfy all or part of the four monitoring periods requirements.

c. Facilities that obtain initial coverage under the 2024 industrial stormwater general permit, but are not newly constructed facilities as identified in 9VAC25-151-60 C 13.

(1) Owners of facilities in the Chesapeake Bay watershed that obtain initial coverage under the 2024 industrial stormwater general permit shall monitor their discharges for TN and TP to characterize the contributions from their facility's specific industrial sector for these parameters. Total nitrogen is the sum of total Kjeldahl nitrogen (TKN) and nitrite + nitrate and shall be derived from the results of those tests. After the facility is granted coverage under the permit, samples shall be collected during each of the first four quarters of permit coverage. Samples shall be collected and analyzed in accordance with Part V B. Monitoring results shall be reported in accordance with Part V C and Part II C, and retained in accordance with Part II B. Calculations utilizing the procedures in Part V D, and a Chesapeake Bay TMDL action plan if required under Part V E, shall be submitted no later than 60 days following the completion of the fourth sample to the DEQ regional office serving the area where the industrial facility is located on a form provided by the department. Reductions, if applicable, shall be achieved by two years following the end of the fourth quarterly monitoring period and an annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the required reductions until such time that the demonstration is completed. The demonstration shall be submitted to the department no later than the 10th of the

month directly following the two-year period. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

2. Monitoring Instructions and Reporting Monitoring Results.

These sections are identical to those listed under Part I of the general permit discussed previously, but are copied into this section and crafted specifically for Chesapeake Bay TMDL monitoring and reporting. Of note, monitoring periods are defined as quarterly (Jan-Mar, Apr-June, July-Sept, Oct-Dec) with monitoring results due the 10th of the month following each calendar quarter. Further, it is clarified that the representative outfalls provisions may be used f Chesapeake Bay TMDL monitoring.

3. Calculation of facility loads.

Permittees required to collect nutrient and sediment data in accordance with Part V A 2 or A 3 shall analyze the data collected to determine if pollution reductions are required. The permittee shall average the data collected at the facility for each of the pollutants of concern (POC) (e.g., TP and TN) and compare the results to the loading rates for TP and TN presented in Part V A 1.

The following formula may be used to determine the loading rate:

$L = 0.226 \times P \times Pj \times (0.05 + (0.9 \times Ia)) \times C$

where:

L = the POC loading rate (lb/acre/year)

P = the annual rainfall (inches/year) - The permittee may use either actual annual average rainfall data for the facility location (in inches/year), the Virginia annual average rainfall of 44.3 inches/year, or another method approved by the department.

Pj = the fraction of annual events that produce runoff - The permittee shall use 0.9 unless the department approves another rate.

Ia = the impervious fraction of the facility impervious area of industrial activity to the facility industrial activity area

C = the POC average concentration of all facility samples (mg/L) - Facilities with multiple outfalls shall calculate a weighted average concentration for each outfall using the drainage area of each outfall.

For total phosphorus, all daily concentration data below the quantitation level (QL) for the analytical method used shall be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

For total nitrogen, if none of the daily concentration data for the respective species (i.e., TKN, nitrate, or nitrite) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

Calculations shall be submitted to the department within 60 days from the end of the last monitoring period that satisfies the monitoring requirements in Part V A 2 or Part V A 3. Calculations shall be submitted to the DEQ regional office serving the area where the industrial facility is located, on a form provided by the department, and maintained with the facility's SWPPP.

Alternative calculations may be proposed on a case-by-case basis to address facilities with outfalls that rarely discharge.

4. Chesapeake Bay TMDL action plan requirements.

For permittees required to submit calculations in accordance with Part V D, if the calculated facility loading rate for TP or TN is above the loading rates for TP or TN presented in Part V A, then the permittee shall develop and submit a Chesapeake Bay TMDL action plan to the department.

The Chesapeake Bay TMDL action plan shall be submitted on a form provided by the department to the regional office serving the area where the industrial facility is located within 60 days following the completion of the fourth sample. A copy of the current Chesapeake Bay TMDL action plan and all facility loading rate calculations shall be maintained with the facility's SWPPP. The Chesapeake Bay TMDL action plan shall include:

a. A determination of the total pollutant load reductions for TP and TN (as appropriate) necessary to reduce the annual loads from industrial activities. This shall be determined by multiplying the industrial acreage times the difference between the TMDL loading rates listed in Part V A and the actual facility loading rates calculated in accordance with Part V D . The reduction applies to the total difference calculated for each pollutant of concern;

b. The means and methods, such as management practices and retrofit programs that will be utilized to meet the required reductions determined in Part V E 1 and a schedule to achieve those reductions by the applicable deadline set in Part V A 2 or A 3.

(1) Pollutant reductions may be achieved using a combination of the following alternatives:

(a) Reductions provided by one or more of the BMPs from the Virginia Stormwater BMP Clearinghouse listed in 9VAC25-870-65, approved BMPs found on the Virginia Stormwater Clearinghouse website, or BMPs approved by the Chesapeake Bay Program. Any BMPs implemented to provide the required pollutant reductions shall be incorporated in the SWPPP and be permanently maintained by the permittee.

(b) Implementation of site-specific BMPs followed by a minimum of four stormwater samples collected in accordance with sampling requirements in Part I B 8 a that demonstrate pollutant loadings have been reduced below those calculated under Part I B 8 c. Any BMPs implemented to provide the required pollutant reductions shall be incorporated in the SWPPP and be permanently maintained by the permittee; or,

(c) Acquisition of nonpoint source credits certified by the board as perpetual in accordance with § 62.1-44.19:20 of the Code of Virginia.

Environmental Justice and Climate Change:

DEQ is in the process of addressing these concerns at a much higher level than specific permit requirements related to environmental justice and climate change. The Commonwealth of Virginia has proactively worked on the topics of environmental justice and climate resiliency within and outside the permitting process.

In 2020, the Commonwealth enacted the Virginia Environmental Justice Act (Act), codified at §§ 2.2-234 and 2.2-235 of the Code of Virginia, which states that it is Virginia's policy "to promote environmental justice and ensure that it is carried out throughout the Commonwealth, with a focus on environmental justice and fence line communities." Further, DEQ's enabling statute, § 10.1-1183 of the Code of Virginia, was amended to include in its statement of policy that DEQ's purpose, among others, is "[t]o ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, faith, disability, or income with respect to the administration of environmental laws, regulations, and policies." The policy statement was also amended to include a statement affirming that agency would "further environmental justice and enhance public participation in the regulatory and permitting processes." A detailed overview of ongoing activities is available on DEQ's Environmental Justice webpage. DEQ has recently released draft guidance, Environmental Justice in the Permitting Process for public comment. Once finalized in accordance with Virginia's Administration Process Act, this guidance document will serve as the guidepost for ensuring environmental justice is included in the permitting process.

The Commonwealth of Virginia has established the Chief Resilience Officer as the primary coordinator of resilience and adaptation initiatives in Virginia pursuant to § 2.2-220.5 of the Code of Virginia. As such they are the primary point of contact regarding recurrent flooding, all flooding related pre-disaster hazard mitigation, and adaptation. The Secretary of Natural and Historic Resources, Travis A. Voyles, is the Chief Resilience Officer for the Commonwealth of Virginia, a Cabinet level position for the Commonwealth of Virginia. One of the primary responsibilities of the Chief Resilience Office is to create and oversee the implementation of a Virginia Flood Protection Master Plan and a Virginia Coastal Resilience Master Plan in accordance with § 10.1-602 of the Code of Virginia to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, health, the economy, and the environment. The Commonwealth of Virginia's Chief Resilience Officer coordinates these activities through the Department of Conservation and Recreation, specifically the Department of Conservation and Recreation's Office of Resilience Planning.