

9 VAC 25-151-10 et seq. - GENERAL VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) PERMIT FOR DISCHARGES OF STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITY**9 VAC 25-151-140. Sector F - Primary metals.**

A. Discharges covered under this section. The requirements listed under this section apply to storm water discharges associated with industrial activity from the following types of facilities in the primary metal industry, and generally described by the SIC code shown:

1. 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 Code 331).
2. Iron and steel foundries, including: gray and ductile iron, malleable iron, steel investment, and steel foundries not elsewhere classified (SIC Code 332).
3. Primary smelting and refining of nonferrous metals, including: primary smelting and refining of copper, and primary production of aluminum (SIC Code 333).
4. Secondary smelting and refining of nonferrous metals (SIC Code 334).
5. 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 Code 335).
6. Nonferrous foundries (castings), including: aluminum die-castings, nonferrous die-castings, except aluminum, aluminum foundries, copper foundries, and nonferrous foundries, except copper and aluminum (SIC Code 336).
7. Miscellaneous primary metal products, not elsewhere classified, including: metal heat treating, and primary metal products, not elsewhere classified (SIC Code 339).

Activities covered include, but are not limited to, storm water discharges associated with coking operations, sintering plants, blast furnaces, smelting operations, rolling mills, casting operations, heat treating, extruding, drawing, or forging of all types of ferrous and nonferrous metals, scrap, and ore.

B. Storm water pollution prevention plan requirements. In addition to the requirements of Part III, the plan shall include, at a minimum, the following items.

1. Site description.
 - a. Site map. The site map shall identify where any of the following activities may be exposed to precipitation/surface runoff: storage or disposal of wastes such as spent solvents/baths, sand, slag/dross; liquid storage tanks/drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw materials such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate sources where an accumulation of significant amounts of

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particulate matter could occur from such sources as furnace or oven emissions, losses from coal/coke handling operations, etc., and that could result in a discharge of pollutants to surface waters.

b. Inventory of exposed materials. The inventory of materials handled at the site that potentially may be exposed to precipitation/runoff should include areas where deposition of particulate matter from process air emissions or losses during material handling activities are possible.

2. Storm water controls.

a. Good housekeeping. The SWPPP should consider implementation of the following measures, or equivalent measures, where applicable.

(1) Establishment of a cleaning/maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading/unloading, storage, handling, and processing occur.

(2) The paving of areas where vehicle traffic or material storage occur, but where vegetative or other stabilization methods are not practicable. Sweeping programs shall be instituted in these areas as well.

(3) For unstabilized areas of the facility where sweeping is not practical, the permittee should consider using storm water management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures, that effectively trap or remove sediment.

b. Routine facility inspections. Inspections shall be conducted at least quarterly, and shall address all potential sources of pollutants, including (if applicable):

(1) Air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones) should be inspected for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. The permittee should consider monitoring air flow at inlets/outlets, or equivalent measures, to check for leaks (e.g., particulate deposition) or blockage in ducts;

(2) All process or material handling equipment (e.g., conveyors, cranes, and vehicles) should be inspected for leaks, drips, or the potential loss of materials; and

(3) Material storage areas (e.g., piles, bins or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks/drums) should be examined for signs of material losses due to wind or storm water runoff.

C. Benchmark monitoring and reporting requirements. Primary metals facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table 140 below.

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Table 140.

Sector F - Benchmark Monitoring Requirements.

Pollutants of Concern	Monitoring Cut-Off Concentration
Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	
Total Recoverable Aluminum	750 ug/L
Total Recoverable Zinc	120 ug/L
Iron and Steel Foundries (SIC 3321-3325)	
Total Recoverable Aluminum	750 ug/L
Total Suspended Solids (TSS)	100 mg/L
Total Recoverable Copper	18 ug/L
Total Recoverable Iron	1 mg/L
Total Recoverable Zinc	120 ug/L
Rolling, Drawing, and Extruding of Nonferrous Metals (SIC 3351-3357)	
Total Recoverable Copper	18 ug/L
Total Recoverable Zinc	120 ug/L
Nonferrous Foundries (SIC 3363-3369)	
Total Recoverable Copper	18 ug/L
Total Recoverable Zinc	120 ug/L

9 VAC 25-151-150. Sector G - Metal mining (ore mining and dressing).

A. Discharges covered under this section. The requirements listed under this section apply to storm water 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 storm water 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, such as custom mills. For the purposes of this section, the term "metal mining" includes any of the separate activities listed above. Covered discharges include:

1. All storm water discharges from inactive metal mining facilities; and

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2. Storm water discharges from the following areas of active and temporarily inactive metal mining facilities : waste rock/overburden piles if composed entirely of storm water and not combining with mine drainage; topsoil piles; off-site haul/access roads ; on-site haul/access roads constructed of waste rock/overburden if composed entirely of storm water and not combining with mine drainage; on-site haul/access roads not constructed of waste rock/overburden/spent ore except if mine drainage is used for dust control; runoff from tailings dams/dikes when not constructed of waste rock/tailings and no process fluids are present; runoff from tailings dams/dikes when constructed of waste rock/tailings and no process fluids are present if composed entirely of storm water and not combining with mine drainage; concentration building if no contact with material piles; mill site if no contact with material piles; office/administrative building and housing if mixed with storm water from industrial area; chemical storage area; docking facility if no excessive contact with waste product that would otherwise constitute mine drainage; explosive storage; fuel storage; vehicle/equipment maintenance area/building; parking areas (if necessary); power plant; truck wash areas if no excessive contact with waste product that would otherwise constitute mine drainage; unreclaimed, disturbed areas outside of active mining area; reclaimed areas released from reclamation bonds prior to December 17, 1990; and partially/inadequately reclaimed areas or areas not released from reclamation bonds.

B. Limitations on coverage. Storm water 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 (2002)) are not authorized by this permit.

Note: Discharges that come in contact with overburden/waste rock are subject to 40 CFR Part 440 (2002), providing: the discharges drain to a point source (either naturally or as a result of intentional diversion), and they combine with mine drainage that is otherwise regulated under 40 CFR Part 440(2002). Discharges from overburden/waste rock can be covered under this permit if they are composed entirely of storm water and do not combine with sources of mine drainage that are subject to 40 CFR Part 440 (2002).

C. Special Conditions. Prohibition of nonstorm water discharges. In addition to the general prohibition of nonstorm water discharges in Part I B 1, the following discharges are not covered by this permit: adit drainage or contaminated springs or seeps.

D. Special definitions. The following definitions are only for this section of the general permit:

"Active metal mining facility" means a place where work or other related activity to the extraction, removal, or recovery of metal ore is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun.

"Active phase" means activities including each step from extraction through production of a salable product.

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"Exploration and construction phase" entails exploration and land disturbance activities to determine the financial viability of a site. Construction includes the building of site access roads and removal of overburden and waste rock to expose mineable minerals.

"Inactive metal mining facility" means a site or portion of a site where metal mining and/or milling occurred in the past but is not an active facility as defined in this permit, and where the inactive portion is not covered by an active mining permit issued by the applicable (federal or state) governmental agency.

"Mining operation" typically consists of three phases, any one of which individually qualifies as a "mining activity." The phases are the exploration and construction phase, the active phase, and the reclamation phase.

"Reclamation phase" means activities intended to return the land to its premining use.

"Temporarily inactive metal mining facility" means a site or portion of a site where metal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable (federal or state) government agency.

E. Storm water pollution prevention plan requirements. In addition to the requirements of Part III, the plan shall include, at a minimum, the following items.

1. SWPPP requirements for active and temporarily inactive metal mining facilities.

a. Site description.

(1) Activities at the facility. A description of the mining and associated activities taking place at the site that can potentially affect storm water discharges covered by this permit. The description shall include the total acreage within the mine site; an estimate of the number of acres of disturbed land; an estimate of the total amount of land proposed to be disturbed throughout the life of the mine and a general description of the location of the site relative to major transportation routes and communities.

(2) Site map. The site map shall identify the locations of the following, as appropriate: mining/milling site boundaries; access and haul roads; an outline of the drainage areas of each storm water outfall within the facility, and an indication of the types of discharges from the drainage areas; equipment storage, fueling and maintenance areas; materials handling areas; outdoor manufacturing, storage or material disposal areas; storage areas for chemicals and explosives; areas used for storage of overburden, materials, soils or wastes; location of mine drainage (where water leaves mine) or any other process water; tailings piles/ponds, both proposed and existing; heap leach pads; points of discharge from the property for mine drainage/process water; surface waters; and boundary of tributary areas that are subject to effluent limitations guidelines.

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b. Summary of potential pollutant sources. For each area of the mine/mill site where storm water discharges associated with industrial activities occur, the types of pollutants likely to be present in significant amounts must be identified (e.g., heavy metals, sediment). The following factors must be considered: the mineralogy of the ore and waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced or discharged; the likelihood, if any, of contact with storm water; vegetation of site; history of significant leaks/spills of toxic or hazardous pollutants. A summary of any existing ore or waste rock/overburden characterization data and test results for potential generation of acid rock shall also be included. If the ore or waste rock/overburden characterization data are updated due to a change in the ore type being mined, the SWPPP shall be updated with the new data.

c. Storm water controls.

(1) Nonstructural BMPs.

(a) Routine facility inspections. Active mining sites must be inspected at least monthly. Temporarily inactive sites must be inspected at least quarterly unless adverse weather conditions make the site inaccessible.

(b) Employee training. Employee training shall be conducted at least annually at active mining and temporarily inactive sites.

(2) Structural BMPs. Each of the following BMPs shall be considered in the SWPPP. The potential pollutants identified in subpart E 1 b above shall determine the priority and appropriateness of the BMPs selected. If it is determined that one or more of these BMPs are not appropriate for the facility, the plan must explain why it is not appropriate. If BMPs are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), descriptions of them must be included in the SWPPP.

(a) Sediment and erosion control. The measures to consider include: diversion of flow away from areas susceptible to erosion (measures such as interceptor dikes and swales, diversion dikes, curbs and berms); stabilization methods to prevent or minimize erosion (such as temporary or permanent seeding; vegetative buffer strips; protection of trees; topsoiling; soil conditioning; contouring; mulching; geotextiles (matting, netting, or blankets); riprap; gabions; and retaining walls); and structural methods for controlling sediment (such as check dams; rock outlet protection; level spreaders; gradient terraces; straw bale barriers; silt fences; gravel or stone filter berms; brush barriers; sediment traps; grass swales; pipe slope drains; earth dikes; other controls such as entrance stabilization, waterway crossings or wind breaks; or other equivalent measures).

(b) Storm water diversion. A description of how and where storm water will be diverted away from potential pollutant sources to prevent storm water contamination. BMP options may include the following: interceptor dikes and swales;

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diversion dikes, curbs and berms; pipe slope drains; subsurface drains; drainage/storm water conveyance systems (channels or gutters, open top box culverts and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts) or equivalent measures.

(c) Management of runoff. The potential pollutant sources given in 9 VAC 25-151-150 E 1 b must be considered when determining reasonable and appropriate measures for managing runoff.

(d) Capping. Where capping of a contaminant source is necessary, the source being capped and materials and procedures used to cap the contaminant source must be identified.

(e) Treatment. If treatment of a storm water discharge is necessary to protect water quality, include a description of the type and location of storm water treatment that will be used. Storm water treatments include the following: chemical or physical systems; oil/water separators; artificial wetlands; etc.

(f) Certification of discharge testing. The permittee must test or evaluate for the presence of specific mining-related nonstorm water discharges such as seeps or adit discharges or discharges subject to effluent limitations guidelines, such as mine drainage or process water. Alternatively (if applicable), the permittee may certify in the SWPPP that a particular discharge comprised of commingled storm water and nonstorm water is covered under a separate VPDES permit; and that permit subjects the nonstorm water portion to effluent limitations prior to any commingling. This certification shall identify the nonstorm water discharges, the applicable VPDES permit(s), the effluent limitations placed on the nonstorm water discharge by the permit(s), and the points at which the limitations are applied.

2. SWPPP requirements for inactive metal mining facilities.

a. Site description.

(1) Activities at the facility. The SWPPP shall briefly describe the mining and associated activities that took place at the site that can potentially affect the storm water discharges covered by this permit. The following must be included: approximate dates of operation; total acreage within the mine and/or processing site; estimate of acres of disturbed earth; activities currently occurring on-site (e.g., reclamation); a general description of site location with respect to transportation routes and communities.

(2) Site map. The site map shall identify the locations of the following, as appropriate: mining/milling site boundaries; access and haul roads; an outline of the drainage areas of each storm water outfall within the facility, and an indication of the types of discharges from the drainage areas; equipment storage, fueling and maintenance areas; materials handling areas; outdoor manufacturing, storage or material disposal areas; storage areas for chemicals and explosives; areas used for storage of overburden, materials, soils or wastes; location of mine drainage (where water leaves mine) or any

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other process water; tailings piles/ponds, both proposed and existing; heap leach pads; points of discharge from the property for mine drainage/process water; surface waters; and boundary of tributary areas that are subject to effluent limitations guidelines.

b. Summary of potential pollutant sources. For each area of the mine/mill site where storm water discharges associated with industrial activities occur, the types of pollutants likely to be present in significant amounts must be identified (e.g., heavy metals, sediment). The following factors must be considered: the mineralogy of the ore and waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced or discharged; the likelihood, if any, of contact with storm water; vegetation of site; history of significant leaks/spills of toxic or hazardous pollutants. A summary of any existing ore or waste rock/overburden characterization data and test results for potential generation of acid rock shall also be included. If the ore or waste rock/overburden characterization data are updated due to a change in the ore type being mined, the SWPPP shall be updated with the new data.

c. Storm water controls.

(1) Nonstructural BMPs. The nonstructural controls in the general requirements at Part III B 6 b(1) are not required for inactive facilities.

(2) Structural BMPs. Each of the following BMPs shall be considered in the SWPPP. The potential pollutants identified in subpart E 2 b above shall determine the priority and appropriateness of the BMPs selected. If it is determined that one or more of these BMPs are not appropriate for the facility, the plan must explain why it is not appropriate. If BMPs are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), descriptions of them must be included in the SWPPP.

(a) Sediment and erosion control. The measures to consider include: diversion of flow away from areas susceptible to erosion (measures such as interceptor dikes and swales, diversion dikes, curbs and berms); stabilization methods to prevent or minimize erosion (such as temporary or permanent seeding; vegetative buffer strips; protection of trees; topsoiling; soil conditioning; contouring; mulching; geotextiles (matting; netting; or blankets); riprap; gabions; and retaining walls; and structural methods for controlling sediment (such as check dams; rock outlet protection; level spreaders; gradient terraces; straw bale barriers; silt fences; gravel or stone filter berms; brush barriers; sediment traps; grass swales; pipe slope drains; earth dikes; other controls such as entrance stabilization, waterway crossings or wind breaks; or other equivalent measures).

(b) Storm water diversion. A description of how and where storm water will be diverted away from potential pollutant sources to prevent storm water contamination. BMP options may include the following: interceptor dikes and swales; diversion dikes, curbs and berms; pipe slope drains; subsurface drains; drainage/storm water conveyance systems

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(channels or gutters, open top box culverts and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts) or equivalent measures.

(c) Management of runoff. The potential pollutant sources given in 9 VAC 25-151-150 E 2 b must be considered when determining reasonable and appropriate measures for managing runoff.

(d) Capping. Where capping of a contaminant source is necessary, the source being capped and materials and procedures used to cap the contaminant source must be identified.

(e) Treatment. If treatment of a storm water discharge is necessary to protect water quality, include a description of the type and location of storm water treatment that will be used. Storm water treatments include the following: chemical or physical systems; oil/water separators; artificial wetlands; etc..

d. Comprehensive site compliance evaluation. Annual site compliance evaluations may be impractical for inactive mining sites due to remote location/inaccessibility of the site, in which case the permittee must conduct the evaluation at least once every three years. The SWPPP must be documented to explain why annual compliance evaluations are not possible. If the evaluations will be conducted more often than every three years, the frequency of evaluations must be specified.

F. Benchmark monitoring and reporting requirements.

1. Copper ore mining and dressing facilities. Active copper ore mining and dressing facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table 150-1 below.

2. Discharges from waste rock and overburden piles at active ore mining and dressing facilities. Active ore mining and dressing facilities with discharges from waste rock and overburden piles must perform analytic monitoring for the parameters listed in Table 150-1. Facilities must also monitor for the parameters listed in Table 150-2. However, the director may notify the facility that additional monitoring must be performed to accurately characterize the quality and quantity of pollutants discharged from the waste rock/overburden piles. Monitoring requirements for discharges from waste rock and overburden piles are not eligible for the waiver in Part I A 3 b.

Table 150-1.

Sector G - Benchmark Monitoring Requirements.

Pollutants of Concern	Monitoring Cut-Off Concentration
Active Copper Ore Mining and Dressing Facilities (SIC 1021)	
Total Suspended Solids (TSS)	100 ug/L <u>mg/l</u>

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Discharges From Waste Rock and Overburden Piles From Active Ore Mining or Dressing Facilities Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores Except Vanadium; Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099)	
Total Suspended Solids (TSS)	100 mg/L
Turbidity (NTUs)	5 NTUs above background
pH	6.0 - 9.0 s.u.
Hardness (as CaCO ₃)	no benchmark value
Total Recoverable Antimony	640 ug/L
Total Recoverable Arsenic	50 ug/L
Total Recoverable Beryllium	130 ug/L
Total Recoverable Cadmium	3.9 ug/L
Total Recoverable Copper	18 ug/L
Total Recoverable Iron	1.0 mg/L
Total Recoverable Lead	120 ug/L
Total Recoverable Manganese	1.0 mg/L
Total Recoverable Mercury	2.4 ug/L
Total Recoverable Nickel	1.4 mg/L
Total Recoverable Selenium	20 ug/L
Total Recoverable Silver	4.1 ug/L
Total Recoverable Zinc	120 ug/L

Table 150-2.

Sector G - Additional Monitoring Requirements for Discharges From Waste Rock and Overburden Piles From Active Ore Mining or Dressing Facilities.

Type of Ore Mined	Pollutants of Concern		
	TSS (mg/L)	pH	Metals, Total Recoverable
Tungsten Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Nickel Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Aluminum Ore	X	X	Iron.
Mercury Ore	X	X	Nickel (H).
Iron Ore	X	X	Iron (Dissolved).
Platinum Ore			Cadmium (H), Copper (H), Mercury, Lead (H), Zinc (H).

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Titanium Ore	X	X	Iron, Nickel (H), Zinc (H).
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Copper, Lead, Zinc, Gold, Silver and Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Mercury, Zinc (H).
Uranium, Radium and Vanadium	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total Recoverable), Uranium, Zinc (H).

Note: (H) indicates that hardness must also be measured when this pollutant is measured.

9 VAC 25-151-160. Sector H - Coal mines and coal mining-related facilities.

A. Discharges covered under this section. The requirements listed under this section apply to storm water 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 (2002) 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. The requirements of this section shall apply to storm water discharges from coal mining-related activities exempt from SMCRA, including the public financed exemption, the 16-2/3% exemption, the private use exemption, the under 250 tons exemption, the nonincidental tippie exemption, and the exemption for coal piles and preparation plants associated with the end user. Storm water discharges from the following portions of eligible coal mines and coal mining related facilities may be eligible for this permit: haul roads (nonpublic roads on which coal or coal refuse is conveyed), access roads (nonpublic roads providing light vehicular traffic within the facility property and to public roadways), railroad spurs, sidings, and internal haulage lines (rail lines used for hauling coal within the facility property and to off-site commercial railroad lines or loading areas); conveyor belts, chutes, and aerial tramway haulage areas (areas under and around coal or refuse conveyor areas, including transfer stations); and equipment storage and maintenance yards, coal handling buildings and structures, coal tipples, coal loading facilities and inactive coal mines and related areas (abandoned and other inactive mines, refuse disposal sites and other mining-related areas).

B. Special conditions. Prohibition of nonstorm water discharges. In addition to the general prohibition of nonstorm water discharges in Part I B 1, the following discharges are not covered by this permit: discharges from pollutant seeps or underground drainage from inactive coal mines and refuse disposal areas that do not result from precipitation events and discharges from floor drains in maintenance buildings and other similar drains in mining and preparation plant areas.

C. Storm water pollution prevention plan requirements. In addition to the requirements of Part III, the SWPPP shall include at a minimum, the following items.

1. Site description.

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a. Site map. The site map shall identify where any of the following may be exposed to precipitation/surface runoff:

- (1) Drainage direction and discharge points from all applicable mining-related areas described in 9 VAC 25-151-160 A;
- (2) Acidic spoil, refuse or unreclaimed disturbed areas; and
- (3) Liquid storage tanks containing pollutants such as caustics, hydraulic fluids and lubricants.

b. Summary of potential pollutant sources. A description of the potential pollutant sources from the following activities: truck traffic on haul roads and resulting generation of sediment subject to runoff and dust generation; fuel or other liquid storage; pressure lines containing slurry, hydraulic fluid or other potential harmful liquids; and loading or temporary storage of acidic refuse/spoil.

2. Storm water controls.

a. Good housekeeping. As part of the facility's good housekeeping program, the permittee should consider the following: using sweepers, covered storage, and watering of haul roads to minimize dust generation ; and conservation of vegetation (where possible) to minimize erosion.

b. Preventive maintenance. The ~~permittee~~ permittee shall also perform inspections of storage tanks and pressure lines for fuels, lubricants, hydraulic fluid or slurry to prevent leaks due to deterioration or faulty connections; or other equivalent measures.

3. Comprehensive site compliance evaluation. The evaluation program shall also include inspections for pollutants entering the drainage system from activities located on or near coal mining-related areas. Among the areas to be inspected: haul and access roads; railroad spurs, sliding and internal hauling lines; conveyor belts, chutes and aerial tramways; equipment storage and maintenance yards; coal handling buildings/structures; and inactive mines and related areas.

D. Benchmark monitoring and reporting requirements. Coal mining facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table 160.

Table 160.

Sector H - Benchmark Monitoring Requirements.

Pollutants of Concern	Monitoring Cut-Off Concentration
Coal Mines and Related Areas (SIC 1221-1241)	
Total Recoverable Aluminum	750 ug/L
Total Recoverable Iron	1 mg/L

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Total Suspended Solids (TSS)	100 mg/L
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9 VAC 25-151-180. Sector K - Hazardous waste treatment, storage, or disposal facilities.

A. Discharges covered under this section. The requirements listed under this section apply to storm water discharges associated with industrial activity from facilities that treat, store, or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of RCRA (Industrial Activity Code "HZ"). Disposal facilities that have been properly closed and capped, and have no significant materials exposed to storm water, are considered inactive and do not require permits.

B. Special conditions. Prohibition of nonstorm water discharges. In addition to the general prohibition of nonstorm water discharges in Part I B 1, the following discharges are not covered by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory-derived wastewater and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

C. Definitions.

"Contaminated storm water" means storm water that comes in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in this section. Some specific areas of a landfill that may produce contaminated storm water include, but are not limited to: the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment or machinery that has been in direct contact with the waste; and waste dumping areas.

"Drained free liquids" means aqueous wastes drained from waste containers (e.g., drums, etc.) prior to landfilling.

"Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

"Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, a salt bed formation, an underground mine or a cave as these terms are defined in 40 CFR 257.2 (2002), 40 CFR 258.2 (2002) and 40 CFR 260.10 (2002).

"Landfill wastewater" as defined in 40 CFR Part 445 (2002) (Landfills Point Source Category) means all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, noncontaminated storm water, contaminated ground water, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection

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condensate, drained free liquids, laboratory derived wastewater, contaminated storm water and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

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

"Noncontaminated storm water" means storm water that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined above. Noncontaminated storm water includes storm water that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

"Pile" means any noncontainerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

"Surface impoundment" means a facility or part of a facility that is a natural topographic depression, man-made excavation or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds and lagoons.

D. Numeric effluent limitations. As set forth at 40 CFR Part 445 Subpart A (2002), the numeric limitations in Table 180-1 apply to contaminated storm water discharges from hazardous waste landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) (2002) and 265 (Subpart N) (2002) except for any of the facilities described in subdivisions 1 through 4 of this subsection:

1. Landfills operated in conjunction with other industrial or commercial operations when the landfill only receives wastes generated by the industrial or commercial operation directly associated with the landfill;
2. Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes provided the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N (2002) as the industrial or commercial operation or the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
3. Landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437 (2002) so long as the CWT facility commingles the landfill wastewater with other nonlandfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or

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4. Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Table 180-1.

Sector K - Numeric Effluent Limitations.

Parameter	Effluent Limitations	
	Maximum Daily	Maximum Monthly Average
Hazardous Waste Treatment, Storage, or Disposal Facilities (Industrial Activity Code "HZ") Subject to the Provisions of 40 CFR Part 445 Subpart A (2002).		
Biochemical Oxygen Demand (BOD ₅)	220 mg/L	56 mg/L
Total Suspended Solids (TSS)	88 mg/L	27 mg/L
Ammonia	10 mg/L	4.9 mg/L
Alpha Terpineol	0.042 mg/L	0.019 mg/L
Aniline	0.024 mg/L	0.015 mg/L
Benzoic Acid	0.119 mg/L	0.073 mg/L
Naphthalene	0.059 mg/L	0.022 mg/L
p-Cresol	0.024 mg/L	0.015 mg/L
Phenol	0.048 mg/L	0.029 mg/L
Pyridine	0.072 mg/L	0.025 mg/L
Arsenic (Total)	1.1 mg/L	0.54 mg/L
Chromium (Total)	1.1 mg/L	0.46 mg/L
Zinc (Total)	0.535 mg/L	0.296 mg/L
pH	Within the range of 6.0 - 9.0 s.u.	

E. Benchmark monitoring and reporting requirements. Permittees with hazardous waste treatment, storage, or disposal facilities (TSDFs) are required to monitor their storm water discharges for the pollutants of concern listed in Table 180-2. These benchmark monitoring cutoff concentrations apply to storm water discharges associated with industrial activity other than contaminated storm water discharges from landfills subject to the numeric effluent limitations set forth in Table 180-1.

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Table 180-2.

Sector K - Benchmark Monitoring Requirements.

Pollutants of Concern	Monitoring Cut-Off Concentration
Hazardous Waste Treatment, Storage, or Disposal Facilities (Industrial Activity Code "HZ")	
Total Kjeldahl Nitrogen (TKN)	1.5 mg/L
Total Suspended Solids (TSS)	100 mg/L
Total Organic Carbon (TOC)	110 mg/L
Total Recoverable Arsenic	50 ug/L
Total Recoverable Cadmium	3.9 ug/L
Total Cyanide	22 ug/L
Total Recoverable Lead	120 ug/L
Total Recoverable Mercury	2.4 ug/L
Total Recoverable Selenium	20 ug/L
<u>Total</u> Recoverable Silver	4.1 ug/L

9 VAC 25-151-230. Sector P - Land Transportation and Warehousing.

A. Discharges covered under this section. The requirements listed under this section apply to storm water 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) and/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 and/or equipment cleaning operations.

B. Storm water pollution prevention plan requirements. In addition to the requirements of Part III, the SWPPP shall include, at a minimum, the following items.

1. Site description. Site Map. The site map shall identify the locations of any of the following activities or sources: fueling stations; vehicle/equipment maintenance or cleaning areas; storage areas for vehicle/equipment with actual or potential fluid leaks; loading/unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; storage areas; and all monitoring areas.

2. Summary of potential pollutant sources. The plan shall describe and assess the potential for the following to contribute pollutants to storm water discharges: on-site waste storage or disposal; dirt/gravel parking areas for vehicles awaiting maintenance; and fueling areas.

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3. Storm water controls.

a. Good housekeeping.

(1) Vehicle and equipment ~~storage~~ storage areas. The storage of vehicles and equipment awaiting maintenance with actual or potential fluid leaks must be confined to designated areas (delineated on the site map). The permittee shall consider the following measures (or their equivalents): the use of drip pans under vehicles and equipment; indoor storage of vehicles and equipment; installation of berms or dikes; use of absorbents; roofing or covering storage areas; and cleaning pavement surface to remove oil and grease.

(2) Fueling areas. The permittee shall describe and implement measures that prevent or minimize contamination of the storm water runoff from fueling areas. The permittee shall consider the following measures (or their equivalents): covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing storm water runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected storm water runoff.

(3) Material storage areas. Storage vessels of all materials (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) must be maintained in good condition, so as to prevent contamination of storm water, and plainly labeled (e.g., "used oil," "spent solvents," etc.). The permittee shall consider the following measures (or their equivalents): indoor storage of the materials; installation of berms/dikes around the areas, minimizing runoff of storm water to the areas; using dry cleanup methods; and treating and/or recycling the collected storm water runoff.

(4) Vehicle and equipment cleaning areas. The permittee shall describe and implement measures that prevent or minimize contamination of storm water runoff from all areas used for vehicle/equipment cleaning. The permittee shall consider the following measures (or their equivalents): performing all cleaning operations indoors; covering the cleaning operation; ensuring that all washwaters drain to a proper collection system (i.e., not the storm water drainage system unless VPDES permitted) ; and treating and/or recycling the collected storm water runoff. Note: the discharge of vehicle/equipment wash waters, including tank cleaning operations, are not authorized by this permit and must be covered under a separate VPDES permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

(5) Vehicle and equipment maintenance areas. The permittee shall describe and implement measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle/equipment maintenance. The permittee shall consider the following measures (or their equivalents): performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluids prior to disposal; prohibiting wet clean up practices where the practices would result in the discharge of pollutants to storm water drainage systems; using

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dry cleanup methods ; treating and/or recycling collected storm water runoff; and minimizing runoff of storm water to maintenance areas.

(6) Locomotive sanding (loading sand for traction) areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from areas used for locomotive sanding. The permittee shall consider the following measures (or their equivalents): covering sanding areas; minimizing storm water runoff; or appropriate sediment removal practices to minimize the off-site transport of sanding material by storm water.

b. Routine facility inspections. The following areas/activities shall be included in all inspections: storage area for vehicles/equipment awaiting maintenance; fueling areas; indoor and outdoor vehicle/equipment maintenance areas; material storage areas; vehicle/equipment cleaning areas; and loading/unloading areas.

c. Employee training. Employee training shall take place, at a minimum, annually (once per calendar year). Employee training must address the following, as applicable : used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

d. Nonstorm water discharges. For facilities that discharge vehicle and equipment washwaters to the sanitary sewer system, the operator of the sanitary system and associated treatment plant must be notified. In such cases, a copy of the notification letter must be attached to the plan. If an industrial user permit is issued under a pretreatment program, a reference to that permit must be in the plan. In all cases, any permit conditions or pretreatment requirements must be considered in the plan. If the washwaters are handled in another manner (e.g., hauled off-site), the disposal method must be described and all pertinent documentation (e.g., frequency, volume, destination, etc.) must be attached to the plan.

9 VAC 25-151-280. Sector U - Food and kindred products.

A. Discharges covered under this section. The requirements listed under this section apply to storm water discharges associated with industrial activity from food and kindred products processing facilities (commonly identified by SIC Code 20), including: meat products; dairy products; canned, frozen and preserved fruits, vegetables, and food specialties; grain mill products; bakery products; sugar and confectionery products; fats and oils; beverages; and miscellaneous food preparations and kindred products and tobacco products manufacturing (SIC Code 21).

B. Special conditions. Prohibition of nonstorm water discharges. In addition to the general nonstorm water prohibition in Part I B 1, the following discharges are not covered by this permit: boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging, and vehicle washing/clean-out operations.

C. Storm water pollution prevention plan requirements. In addition to the requirements of Part III, the SWPPP shall include, at a minimum, the following items.

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1. Site description.

a. Site map. The site map shall identify the locations of the following activities if they are exposed to precipitation/surface runoff: vents/stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

b. Summary of potential pollutant sources. In addition to food and kindred products processing-related industrial activities, the plan must also describe application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides, etc.) used on plant grounds.

2. Storm water controls.

a. Routine facility inspections. At a minimum, the following areas, where the potential for exposure to storm water exists, must be inspected: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

b. Employee training. The employee training program must also address pest control.

D. Benchmark monitoring and reporting requirements. Grain mills and fats and oils products facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table 280.

Table 280.

Sector U - Benchmark Monitoring Requirements.

Pollutants of Concern	Monitoring Cut-Off Concentration
Grain Mill Products (SIC 2041-2048)	
Total Kjeldahl Nitrogen (TKN)	1.5 mg/L
<u>Total Suspended Solids (TSS)</u>	<u>100 mg/L</u>
Fats and Oils Products (SIC 2074-2079)	
Biochemical Oxygen Demand (BOD ₅)	30 mg/L
Total Nitrogen	2.2 mg/L
Total Suspended Solids (TSS)	100 mg/L

Certified True and Accurate: _____
 Robert G. Burnley, Director, DEQ

Date: _____