

**APPENDIX I.O - Storm Water Discharges Associated with Industrial Activity from Steam Electric Power Generating Facilities, Including Coal Handling Areas**

A. Coverage of This Section.

1. Discharges Covered Under This Section. The requirements listed under this Part shall apply to storm water discharges from the following activities:

**Table I.O.1 – Sector O: Steam Electric Power Generating Facilities, Including Coal Handling Areas**

SIC Code (Activity Code)	Activity Represented
4911 (SE)	Steam electric power generation using coal, natural gas, oil, nuclear energy, etc., to produce a steam source, including coal handling areas (does not include geothermal power)
	Coal pile runoff, including effluent limitations established by 40 CFR Part 423
	Dual fuel facilities that could employ a steam boiler

2. Sector Specific Limitations on Coverage. In addition to the limitations on coverage listed in *Part I.C*, the following stormwater discharges associated with industrial activity are **not** authorized by this permit:
  - a. Ancillary facilities (i.e. fleet centers and substations) that are not contiguous to a steam electric power generating facility;
  - b. Gas turbine facilities, provided the facility is not a dual-fuel facility that includes a steam boiler;
  - c. Combined-cycle facilities where no supplemental fuel oil is burned and the facility is not a dual-fuel facility that includes a steam boiler;
  - d. Cogeneration (combined heat and power) facilities utilizing a gas turbine.
3. Sector Specific Prohibition of Non-Stormwater Discharges. In addition to those non-storm water discharges prohibited under *Part I.D*, this permit does **not** authorize the discharge of:
  - a. Non-stormwater discharges subject to effluent limitation guidelines.

B. Sector Specific Control Measures and Effluent Limits.

In addition to the control measures and effluent limits in *Part III*, the permittee shall implement the following to minimize pollutant discharges, as applicable:

1. Good Housekeeping. Good housekeeping measures, such as the following, shall be used to minimize potential sources of pollutants in stormwater at the facility:
  - a. Fugitive Dust Emissions. The permittee shall minimize fugitive dust emissions from coal handling areas to minimize the tracking of coal dust offsite that could be discharged in stormwater through implementation of control measures, such as the following, where feasible:
    - 1) Installing specifically designed tires; and

- 2) Washing vehicles in designated areas before they leave the site and controlling the wash water.
- b. Delivery Vehicles. The permittee shall minimize contamination of stormwater from delivery vehicles arriving at the plant site through practices such as the following, where feasible:
- 1) Inspecting delivery vehicles arriving at the plant site as necessary to ensure the overall integrity of the body or container; and
  - 2) Implementing procedures to deal with leakage or spillage from delivery vehicle.
- c. Fuel Oil Unloading Areas. The permittee shall minimize contamination of stormwater from fuel oil unloading areas through practices such as the following, where feasible:
- 1) Using containment curbs in unloading areas;
  - 2) Ensuring personnel familiar with spill prevention and response procedures are available to respond expeditiously in the event of a leak or spill during deliveries;
  - 3) Ensuring any leaks or spills are immediately contained and cleaned up; and
  - 4) Using spill and overflow protection devices (i.e. drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).
- d. Chemical Loading and Unloading. The permittee shall minimize contamination of stormwater from chemical loading and unloading areas through practices such as the following, where feasible:
- 1) Using containment curbs at chemical loading and unloading areas to contain spills;
  - 2) Ensure personnel familiar with spill prevention and response procedures are available to respond expeditiously in the event of a leak or spill during deliveries;
  - 3) Ensuring leaks and spills are immediately contained and cleaned up; and
  - 4) Loading and unloading in covered areas and storing chemicals indoors.
- e. Miscellaneous Loading and Unloading Areas. The permittee shall minimize contamination of stormwater from loading and unloading areas through implementing controls measures, such as the following, where feasible:
- 1) Covering the loading area;
  - 2) Minimizing storm water run-on to the loading area by grading, berming, or curbing around the loading and unloading areas to direct storm water away; and
  - 3) Locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems.
- f. Liquid Storage Tanks. The permittee shall minimize contamination of stormwater from above-ground liquid storage tanks through implementation of control measures, such as the following, where feasible:
- 1) Using protective guards around tanks;
  - 2) Using containment curbs;
  - 3) Installing spill and overflow protection (i.e. drip pans, drip diapers, and/or other containment devices placed beneath chemical connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors); and

- 4) Using dry cleanup methods.
- g. Large Bulk Fuel Storage Tanks. The permittee shall minimize contamination of stormwater from large bulk fuel storage tanks through implementation of control measures, such as the following, where feasible:
  - 1) Using containment berms or their equivalent; and
  - 2) Complying with all state and federal laws, including SPCC plan requirements.
- h. Spill Reduction Measures. The permittee shall minimize the potential for an oil or chemical spill, by implementing the following, where feasible:
  - 1) Visually inspecting the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater; and
  - 2) Make any necessary repairs.
- i. Oil-Bearing Equipment in Switchyards. The permittee shall minimize contamination of stormwater from oil-bearing equipment in switchyard areas through implementation of the following, where feasible:
  - 1) Using level grades and gravel surfaces to retard flows and limit the spread of spills; or
  - 2) Collecting stormwater in perimeter ditches.
- j. Residue-Hauling Vehicles. The permittee shall inspect all residue hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the body or container. Vehicles without load coverings or adequate gate sealing, or with leaking containers or beds must be repaired as soon as practicable.
- k. Ash Loading Areas. The permittee shall reduce or control the tracking of ash or residue from ash loading areas and, where feasible, clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water before each loaded vehicle departs to minimize discharges of pollutants to stormwater.
- l. Areas Adjacent to Disposal Ponds or Landfills. The permittee shall minimize contamination of stormwater from areas adjacent to disposal ponds or landfills by implementing control measures, such as the following, where feasible:
  - 1) Reducing ash residue which may be tracked onto access roads traveled by residue hauling vehicles; and
  - 2) Reducing ash residue on exit roads leading into an out of residue hauling areas.
- m. Landfills, Scrap Yards, Surface Impoundments, Open Dumps, General Refuse Sites. The permittee shall minimize the potential for contamination of stormwater from landfills, scrap yards, surface impoundments, open dumps, and general refuse sites. The permittee is referred to *Appendix I.L* and *Appendix I.N* for applicable control measures and sector-specific requirements.

C. Sector Specific Inspection Requirements.

In addition to the inspection requirements in *Part IV.A*, the permittee shall also inspect the following areas **at least monthly**, if they are located at the facility:

1. Coal handling areas;
2. Loading or unloading areas;

3. Switchyards;
4. Fueling areas;
5. Bulk storage areas;
6. Ash handling areas;
7. Areas adjacent to disposal ponds and landfills;
8. Maintenance areas;
9. Liquid storage tanks; and
10. Long-term and short-term material storage areas.

**D. Sector Specific Plan Requirements.**

1. **Site Map.** In addition to the requirements in *Part VII.D.3*, the site map shall also include the location of the following, if applicable:
  - a. Storage tanks, scrap yards, and general refuse areas;
  - b. Short- and long-term storage of general materials, including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides;
  - c. Landfills and construction sites; and
  - d. Stockpile areas (i.e. coal or limestone piles).
2. **Good Housekeeping.** In addition to the requirements in *Part VII.D.5.a*, the Plan good housekeeping measures shall include the following, where applicable:
  - a. Documenting the good housekeeping measures and controls implemented at the facility from *Appendix I.O Part B.1*.

**E. Monitoring Requirements.**

1. **Analytical Benchmark Monitoring.** There are no analytical benchmark monitoring parameters for Sector O facilities in this permit. Any additional monitoring and reporting requirements shall be based on the nature of activities at the facility and the facility stormwater discharges, in accordance with *Part V.D.2*.
2. **Numeric Effluent Limitation Monitoring.** Numeric effluent limitation monitoring shall be required for sector O facilities conducting certain industrial activities. The concentration of pollutants in stormwater discharges, independent of comingling, as discussed in *Part V.C.2*, shall not exceed the following effluent limitations at any time during the duration of permit coverage.

**Table I.O.2 – Numeric Effluent Limitation Monitoring Parameters**

Industrial Activity	Parameter	Effluent Limitation
Discharges from coal storage piles at Steam Electric Generating Facilities	Total Suspended Solids <sup>1</sup>	50 mg/L <sup>2</sup>
	pH	6.0 – 9.0 s.u.

<sup>1</sup>. Sampling for total suspended solids is not required for stormwater discharges that are infiltrating to groundwater.

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- <sup>2</sup>. If the facility is designed, constructed, and operated to treat the volume of coal pile runoff that is associated with a 10-year, 24-hour rainfall event, any untreated overflow of coal pile runoff from the treatment unit is not subject to the 50 mg/L limitation for total suspended solids.

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