



## Archived Publication

This information provided in this document is for reference. Please be aware that the information in this document may be outdated or superseded by additional information.



The Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (2000 MSGP), issued in October 2000, expired at midnight on October 30, 2005. A new permit, the 2008 Multi-Sector General Permit (2008 MSGP) was issued on September 29, 2008. Visit [www.epa.gov/npdes/stormwater/msgp](http://www.epa.gov/npdes/stormwater/msgp) to view the final 2008 MSGP and supporting documents.



## **Part 4 - Sector-Specific Requirements for Industrial Activity**

### **Subsection J - Sector J-Mineral Mining and Dressing**

#### **J.1 Covered Stormwater Discharges.**

The requirements in Subsection J apply to stormwater discharges associated with industrial activity from active and inactive mineral mining and dressing facilities as identified by the SIC Codes specified under Sector J in Table D-1 of Appendix D of the permit.

- J.1.1 Covered Discharges from Inactive Facilities. All stormwater discharges.
- J.1.2 *Covered Discharges from Active and Temporarily Inactive Facilities.* Only the stormwater discharges from the following areas are covered: waste rock and overburden piles if composed entirely of stormwater and not combining with mine drainage; topsoil piles; offsite haul and access roads; onsite haul and access roads constructed of waste rock or overburden if composed entirely of stormwater and not combining with mine drainage; onsite haul and access roads not constructed of waste rock or overburden, except if mine drainage is used for dust control; runoff from dams or dikes when not constructed of waste rock and no process fluids are present; runoff from dams or dikes when constructed of waste rock and no process fluids are present, if composed entirely of stormwater and not combining with mine drainage; concentration building if no contact with material piles; mill site if no contact with material piles; office or administrative building and housing if mixed with stormwater 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 and equipment maintenance area and 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 or inadequately reclaimed areas or areas not released from reclamation bonds.
- J.1.3 Covered Discharges from Exploration and Development of Mineral Mining Facilities. All stormwater discharges.
- J.1.4 Covered Discharges from Facilities at Mining Sites and Undergoing Reclamation. All stormwater discharges.

#### **J.2 Industrial Activities Covered by Sector J.**

Permittees under Sector J are primarily engaged in the following types of activities:

- J.2.1 exploring for minerals (e.g., stone, sand, clay, chemical and fertilizer minerals, non-metallic minerals), developing mines, and the mining of minerals; and
- J.2.2 mineral dressing and non-metallic mineral services, and
- J.2.3 reclamation of mining sites.

### J.3 Limitations on Coverage.

Most stormwater discharges subject to an existing effluent limitation guideline at 40 CFR Part 436 are not authorized by this permit. The exceptions to this limitation, which are covered by this permit, are mine dewatering discharges composed entirely of stormwater or ground water seepage from construction sand and gravel, industrial sand, and crushed stone mining facilities in Regions 1, 2, 3, 6, 8, 9, and 10.

J.3.1 *Prohibition of Stormwater Discharges.* Stormwater discharges not authorized by this permit: discharges from active mineral mining facilities that are subject to effluent limitation guidelines for the Mineral Mining and Processing Point Source Category (40 CFR Part 436).

NOTE: Discharges that come in contact with overburden or waste rock are subject to 40 CFR Part 436, providing that 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 the Part 440 regulations. Discharges from overburden or waste rock can be covered under this permit if they are composed entirely of stormwater, do not combine with sources of mine drainage that are subject to 40 CFR Part 440, and meet other eligibility criteria contained in Part 1.2.2.1.

J.3.2 *Prohibition of Non-Stormwater Discharges.* Not authorized by this permit: adit drainage and contaminated springs or seeps. Contaminated seeps and springs discharging from waste rock dumps that do not directly result from precipitation events are not authorized by this permit (see also the standard Limitations on Coverage in Part 1.2.3).

### J.4 Definitions.

J.4.1 *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.

J.4.2 *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.

J.4.3 *Active phase* - activities including each step from extraction through production of a salable product.

J.4.4 *Reclamation phase* - activities intended to return the land to its pre-mining state.

NOTE: The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

J.4.5 *Active Mineral Mining Facility* - a place where work or other activity related to the extraction, removal, or recovery of minerals is being conducted. This definition does not

include any land where grading has returned the earth to a desired contour and reclamation has begun.

- J.4.6 *Inactive Mineral Mining Facility* - a site or portion of a site where mineral mining and/or dressing occurred in the past but that is not an active facility as defined above, and where the inactive portion is not covered by an active permit issued by the applicable State or Federal government agency.
- J.4.7 *Temporarily Inactive Mineral Mining Facility* - a site or portion of a site where mineral mining and/or dressing occurred in the past but that is not currently being actively undertaken, and where the facility is covered by an active mining permit issued by the applicable State or Federal government agency.
- J.4.8 *Final Stabilization* - a site or portion of a site is “finally stabilized” when:
- a. All soil disturbing activities at the site have been completed and either of the two following criteria are met:
    - i. A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
    - ii. Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
  - b. When background native vegetation will cover less than 100 percent of the ground (e.g., arid areas, beaches), the 70 percent coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground, 70 percent of 50 percent ( $0.70 \times 0.50 = 0.35$ ) would require 35 percent total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

## **J.5 Clearing, Grading, and Excavation Activities.**

Clearing, grading, and excavation activities being conducted as part of the exploration and development phase of a mining operation are covered under this permit.

### *J.5.1 Management Practices for Clearing, Grading, and Excavation Activities.*

- J.5.1.1 *Selecting and installing control measures.* A combination of sediment and erosion control measures are required to achieve maximum pollutant removal. All control measures must be properly selected, installed, and maintained in accordance with any relevant manufacturer specifications and good engineering practices.
- J.5.1.2 *Removal of Sediment.* If sediment escapes the site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

- J.5.1.3 *Good Housekeeping.* Litter, debris, and chemicals that could be exposed to stormwater must be prevented from becoming a pollutant source in stormwater discharges.
- J.5.1.4 *Velocity Dissipation.* Velocity dissipation devices must be placed at discharge locations and along the length of any outfall channel to provide a non-erosive flow velocity from disturbed areas and from any stormwater retention or detention facilities to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).
- J.5.1.5 *Retention and Detention of Stormwater Runoff.* For drainage locations serving more than one acre, sediment basins and/or temporary sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the development area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided.
- J.5.1.6 *Temporary Stabilization of Disturbed Areas.* Stabilization measures must be initiated as soon as practicable in portions of the site where development activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In arid, semiarid, and drought-stricken areas where initiating perennial vegetative stabilization measures is not possible within 14 days after construction activity has temporarily or permanently ceased, final vegetative stabilization measures must be initiated as soon as practicable.
- J.5.2 *Requirements for Inspection of Clearing, Grading, and Excavation Activities.*
- J.5.2.1 *Inspection Frequency.* Inspections must be conducted at least once every 7 calendar days or at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. Inspection frequency may be reduced to at least once every month if the entire site is temporarily stabilized, if runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or the ground is frozen), or construction is occurring during seasonal arid periods in arid areas and semi-arid areas.
- J.5.2.2 *Qualified Personnel for Inspections.* Inspections must be conducted by qualified personnel. "Qualified personnel" means a person knowledgeable in the principles and practice of erosion and sediment control who possesses the skills to assess conditions at the construction site that could impact stormwater quality and the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the clearing, grading, and excavation activities.

J.5.2.3 *Location of Inspections.* Inspections must include all areas of the site disturbed by clearing, grading, and excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures identified in the SWPPP must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

J.5.2.4 *Inspection Reports.* For each inspection required above, you must complete an inspection report. At a minimum, the inspection report must include:

- a. The inspection date;
- b. Names, titles, and qualifications of personnel making the inspection;
- c. Weather information for the period since the last inspection (or note if it is the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
- d. Weather information and a description of any discharges occurring at the time of the inspection;
- e. Location(s) of discharges of sediment or other pollutants from the site;
- f. Location(s) of BMPs that need to be maintained;
- g. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
- h. Location(s) where additional BMPs are needed that did not exist at the time of inspection; and
- i. Corrective action(s) required, including any changes to the SWPPP necessary and implementation dates.

A record of each inspection and of any actions taken in accordance with this Part must be retained as part of the SWPPP for at least three years from the date that permit coverage expires or is terminated. The inspection reports must identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the clearing, grading, and excavation activities are in compliance with the SWPPP and this permit. The report must be signed in accordance with Subpart 11 of Appendix B.

### J.5.3 *Maintenance of Controls for Clearing, Grading, and Excavation Activities*

J.5.3.1 *Maintenance of BMPs.* All erosion and sediment control measures and other protective measures identified in the SWPPP must be maintained in effective operating condition. If site inspections required by Section J.5.2 identify BMPs that are not operating effectively, maintenance must be performed as soon as possible and before the next storm event whenever practicable to maintain the continued effectiveness of stormwater controls.

- J.5.3.2 *Modification of BMPs.* Existing BMPs need to be modified or, if additional BMPs are necessary for any reason, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible.
- J.5.3.3 *Maintenance of sediment traps and ponds.* Sediment from sediment traps or sedimentation ponds must be removed when design capacity has been reduced by 50 percent.
- J.5.4 *Requirements for Cessation of Clearing, Grading, and Excavation Activities.* Inspections and maintenance of BMPs associated with clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of a mining operation must continue until final stabilization has been achieved on all portions of the disturbed area.

## **J.6 Stormwater Pollution Prevention Plan (SWPPP) Requirements.**

The SWPPP requirements in Part J.6 are applicable for active mineral mining facilities, inactive mining facilities, temporarily inactive mineral mining facilities, temporarily inactive mineral mining facilities, and sites undergoing reclamation. In addition to the following requirements, you must also comply with the requirements listed in Part 2 in the permit.

- J.6.1 *Nature of Industrial Activities.* (See also Part 2.1.2) Briefly describe the mining and associated activities that can potentially affect the stormwater discharges covered by this permit, including a general description of the location of the site relative to major transportation routes and communities.
- J.6.2 *Site Map.* (See also Part 2.1.2.) Also identify the locations of the following (as appropriate): mining or milling site boundaries; access and haul roads; outline of the drainage areas of each stormwater outfall within the facility with indications of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual NPDES permit, outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of mine drainage (where water leaves mine) or other process water; heap leach pads; off-site points of discharge for mine drainage and process water; surface waters; boundary of tributary areas that are subject to effluent limitations guidelines; and location(s) of reclaimed areas.
- J.6.3 *Potential Pollutant Sources.* (See also Part 2.1.4) For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, identify the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. Consider these factors: the mineralogy of the waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater; vegetation of site (if any); and history of significant leaks or spills of toxic or

hazardous pollutants. Also include a summary of any existing waste rock or overburden characterization data and test results for potential generation of acid rock.

- J.6.4 *Site Inspections.* (See also Part 2.1.5.5 and J.5.2.) Inspect sites at least monthly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters which are designated as outstanding waters or waters which are impaired for sediment or nitrogen must be inspected monthly.
- J.6.5 *Employee Training.* (See also Part 2.1.5.6) Conduct employee training at least annually at active and temporarily inactive sites. All employee training(s) must be documented in the SWPPP.
- J.6.6 *Stormwater Controls.* (See also Part 2.1.5) Consider each of the following BMPs. The potential pollutants identified in Part J.6.3 shall determine the priority and appropriateness of the BMPs selected. If BMPs are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPPP.
- J.6.6.1 *Stormwater Diversions:* Consider diverting stormwater away from potential pollutant sources. Following are some BMP options: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.
- J.6.6.2 *Erosion and Sedimentation Control:* (See also Part 2.1.5.7) Consider a range of erosion controls within the broad categories of: flow diversion (e.g., swales); stabilization (e.g., temporary or permanent seeding); and structural controls (e.g., sediment traps, dikes, silt fences).
- J.6.6.3 *Management of Runoff:* (See also Part 2.1.5.8) Consider the potential pollutant sources given in Part J.6.3 when determining reasonable and appropriate measures for managing runoff.
- J.6.6.4 *Capping:* When capping is necessary to minimize pollutant discharges in stormwater, identify the source being capped and the material used to construct the cap.
- J.6.6.5 *Treatment:* If treatment of stormwater (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. Passive and/or active treatment of stormwater runoff is encouraged. Treated runoff may be discharged as a stormwater source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Mineral Mining and Processing Point Source Category (40 CFR Part 436).
- J.6.6.6 *Certification of Discharge Testing:* (See also Part 2.1.4.4) Test or evaluate all outfalls covered under this permit for the presence of specific mining-related

non-stormwater discharges such as seeps or adit discharges, or discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 436), such as mine drainage or process water. Alternatively (if applicable), you may certify in your SWPPP that a particular discharge composed of commingled stormwater and non-stormwater is covered under a separate NPDES permit, and that permit subjects the non-stormwater portion to effluent limitations prior to any commingling. This certification must identify the non-stormwater discharges, the applicable NPDES permit(s), the effluent limitations placed on the non-stormwater discharge by the permit(s), and the points at which the limitations are applied.

### J.7 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

<b>Subsector (Discharges may be subject to requirements for more than one sector/subsector)</b>	<b>Parameter</b>	<b>Benchmark Monitoring Concentration<sup>1</sup></b>	<b>Effluent Limitation Guidelines<sup>2</sup></b>
Mine Dewatering Activities at Construction Sand and Gravel; Industrial Sand; and Crushed Stone Mining Facilities (SIC 1422-1429, 1442, 1446)	Total Suspended Solids (TSS)	100 mg/L	25 mg/L, monthly avg.  45 mg/L, daily maximum
	pH	--	6.0 - 9.0
	Nitrate plus Nitrite Nitrogen	0.68 mg/L	--
Sand and Gravel Mining (SIC 1442, 1446)	Total Suspended Solids (TSS)	100 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
Dimension and Crushed Stone and Nonmetallic Minerals (except fuels) (SIC 1411, 1422-1429, 1481, 1499)	Total Suspended Solids (TSS)	100 mg/L	--
Clay, Ceramic, and Refractory Materials; Chemical and Fertilizer Mineral Mining (SIC 1455, 1459, 1474-1479)	Total Suspended Solids (TSS)	100 mg/L	--

<sup>1</sup>You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

<sup>2</sup>Monitor once per year for each monitoring year.

J.7.2 Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Sites, Inactive Sites, and Sites Undergoing Reclamation. For discharges from waste rock and overburden piles, perform analytic monitoring quarterly as explained in Part 3.2.1.2 of the 2005 MSGP for the parameters listed in Table J-1. The Director may also notify you that you must perform additional monitoring to accurately

characterize the quality and quantity of pollutants discharged from your waste rock and overburden piles.

- J.7.3 *Reporting Requirements for Storm Water Discharges From Waste Rock and Overburden Piles.* Submit monitoring results for each outfall discharging storm water from waste rock and overburden piles, or certifications in accordance with Part 3.2.4. Submit monitoring reports on DMR forms postmarked no later than 60 days after collection for each sampling event.

## **J.8. Termination of Permit Coverage**

- J.8.1 *Termination of Permit Coverage for Sites Reclaimed After December 17, 1990.* A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit, provided that the covered storm water discharges do not have the potential to cause or contribute to violations of state water quality standards. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part J.8.2.
- J.8.2 *Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990.* A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if storm water runoff that comes into contact with 1) raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state water quality standards, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to storm water discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.