



# PREVENT STORM WATER CONTAMINATION

## *Best Management Practices for*

### Section G - Metal Mining (ore mining and dressing) Facilities



SIC Codes: 1011 - 1099

#### General Information:

1) Federal Storm Water regulations require the City to reduce the quantity of pollutants that enter our storm drains, rivers and washes from rainwater and other sources. 2) Water from any source that contains contaminants is prohibited from entering the storm drain system which includes streets, catch basins (street grates), ditches, washes and rivers. 3) Commercial and industrial wash or wastewater is prohibited from entering the storm drain system, street or any other outside area. 4) All activities that use soap, solvents, degreasers or any other chemicals must be hauled to a landfill or discharged into the sanitary sewer through a sand/oil interceptor or approved pretreatment device. 5) City Code 32C requires any person or business that has a "potential" to pollute storm water, to develop and implement a Storm Water Management Plan (SWMP). 6) The BMPs listed here are not inclusive and must be tailored for your facility. See 40CFR122 Section 6.G.6 October 30, 2000 for additional required BMPs.

#### Haul and access roads

- ◆ Remove as little vegetation as possible along haul roads near water.
- ◆ Locate roads as far as possible from natural drainage areas, lakes, ponds, wetlands or floodplains where soil is less stable due to heavy traffic.
- ◆ Use curbs, berms and dikes to control run-on and run-off.
- ◆ The width and grade of the haul or access road should be minimal and designed to match the natural contours of the area.
- ◆ Design haul roads to divert run-off from road surfaces.
- ◆ Direct flows to treatment areas.

#### Pits or quarries

- ◆ Minimize impacts on surface waters while excavating a pit or quarry.
- ◆ Remove as little vegetation as possible along haul roads.
- ◆ Divert streams and channels around pits to prevent contamination.

#### Overburden, waste rock, and raw material piles

- ◆ Locate overburden, waste rock, and raw material piles as far from surface water or other sources and from geologically unstable areas as possible.
- ◆ Divert storm water around these piles.

- ◆ Revegetate as many piles as possible (including temporary piles).
- ◆ At closure remaining units should be reclaimed.
- ◆ Structural controls can include sedimentation ponds, check dams, silt fences and straw bale barriers.

#### Reclamation activities

- ◆ Reclaim an exhausted mine according to Federal and State regulations.
- ◆ Stabilize all haul and access roads, pits, quarries, sedimentation ponds, work-out pits and any remaining waste piles.
- ◆ Overburden and topsoil stockpiles may be used to fill in a pit or quarry where practicable.
- ◆ Recontouring and vegetation should be performed to stabilize soils and prevent erosion.
- ◆ Reclamation activities should be conducted in areas that are mined out including inactive areas.

#### Training

- ◆ All employees should be trained in the following areas and BMPs in the SWMP at least once per year.
  - ◆ Spill response.
  - ◆ Good housekeeping.
  - ◆ Material management practices.
  - ◆ Procedures for equipment and container washing.

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#### Inspections

- ◆ Conduct routine quarterly storm water inspections and within 24 hours after a rain event.
- ◆ Complete the BMP checklist during each inspection and maintain the record on file for at least three years.
- ◆ Visually inspect all areas exposed to precipitation for evidence of or the potential for pollutants entering the storm drain system.
- ◆ Inspect all structural (berms and dikes) and non-structural BMPs will be inspected to ensure they are operating correctly.

#### Storm Water Management Plan (SWMP) or Storm Water Pollution Prevention Plan (SWPPP)

- ◆ Develop and implement a SWMP or SWPPP.
- ◆ All Storm Water Plans (SWMP or SWPPP) must be submitted to the City for approval.
- ◆ All regulated facilities (SIC codes) must submit an Industrial Notice of Intent (NOI) to the Arizona Department of Environmental Quality.

#### If spills occur:

- ◆ Stop the source of the spill immediately.
- ◆ Contain the liquid until cleanup is complete.
- ◆ Deploy oil containment booms if the spill may reach water or a storm drain.
- ◆ Cover the spill with absorbent material.
- ◆ Keep the area well ventilated.
- ◆ Dispose of clean-up materials properly.
- ◆ Do not use emulsifier or dispersant.

The BMPs found on this page are paraphrased from Federal Storm Water documents 40CFR122, 1995 or later.

#### Storm Water



**Management**  
A member of **STORM**  
STormwater Outreach for  
Regional Municipalities

#### Only Rain in the Storm Drain!

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**City of Phoenix**

STREET TRANSPORTATION DEPARTMENT  
STORM WATER MANAGEMENT SECTION

Upon request, the Street Transportation Department will make this publication available through appropriate auxiliary aids or services to accommodate an individual with a disability by calling 602-256-3190; or faxing a request to 602-495-2016.