



# PREVENT STORM WATER CONTAMINATION

## *Best Management Practices for*

### Section O - Steam Electric Power Generating Facilities



SIC Codes: 4911, 4931, 4939

#### General Information:

1) Federal and State 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.O.6, October 30, 2000 for additional required BMPs.

#### Fugitive dust

- ◆ Prevent or minimize fugitive dust emissions from coal handling operations.
- ◆ Establish procedures to minimize offsite tracking of coal dust.
- ◆ Consider special tires or washing in a designated area to minimize tracking off-site.

#### Delivery vehicles

- ◆ Prevent or minimize contamination from delivery vehicles entering the site.
- ◆ Inspect the vehicles arriving on site to ensure the overall integrity of the vehicle or container.
- ◆ Control leakage or spillage from vehicles or containers and ensure proper protective measures are available for personnel and environment.

#### Fuel oil unloading areas

- ◆ Use containment curbs in unloading areas.
- ◆ During deliveries have personnel familiar with spill prevention and response on hand to ensure that leaks and spills are contained and cleaned immediately.
- ◆ Use spill and overflow protection such as drip pans, pads or other devices under oil connections.

#### Chemical loading/unloading

- ◆ Use containment curbs in chemical loading/unloading areas.
- ◆ During deliveries have personnel familiar with spill prevention and response on hand to ensure that leaks and spills are contained and cleaned immediately.
- ◆ Cover chemical loading/unloading areas with a roof, if practical and store chemicals indoors.

#### Miscellaneous loading/unloading

- ◆ Consider covering the area.
- ◆ Minimize run-on by grading the area or using berms or curbs to direct storm water around the area.
- ◆ Locate loading/unloading equipment and vehicles so that leaks can be controlled in existing containment and flow diversion systems.

#### Liquid storage (above-ground) tanks

- ◆ Use protective guards around tanks.
- ◆ Use spill and overflow protection like drip pans, pads or other devices under chemical hose connections.
- ◆ Use dry clean-up methods.

#### Large bulk fuel storage tanks

- ◆ Comply with applicable Federal, State and local regulations including Spill Prevention Control and Countermeasures (SPCC).
- ◆ Inspect all tanks, pipes, pumps and other related equipment weekly.
- ◆ Repair faulty equipment immediately after discovery.
- ◆ Use secondary containment measures, such as dikes or berms, around asphalt storage tanks and fuel oil tanks. Provide sufficient containment for outdoor storage areas for the larger of either 10% of the total volume of all containers or 110% of the largest tank.

#### Oil bearing equipment in switchyards

- ◆ Consider leveling grades and gravel surfaces to retard flows and limit the spread of oil spills.
- ◆ Collect storm run-off in perimeter ditches.

#### Residue hauling vehicles

- ◆ Inspect all vehicles to ensure that the load is covered properly.
- ◆ Provide gate sealing and inspect the vehicle body or container for integrity. Repair vehicles without covers, poor gate sealing, or with poor body or container conditions as soon as practicable.

#### Ash loading areas

- ◆ Clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water before each loaded vehicle departs.



## Areas adjacent to disposal ponds or landfills

- ◆ Reduce ash residue which may be tracked on access roads traveled by residue trucks or residue handling equipment.
- ◆ Reduce ash residue on exit roads leading into or out of residue handling areas.

## Landfills, scrap yards and general refuse sites

- ◆ Refer to the BMPs for Landfill, Scrap and Recycling brochures for further details.

## Maintenance activities

- ◆ Refer to the BMPs for Motor Freight, Freight Transportation, Passenger Transportation, Petroleum Bulk Oil Stations and Terminals, and U.S. Postal Services for details.

## Material storage areas (permanent and temporary)

- ◆ Consider flat yard grades.
- ◆ Run-off collection graded swales or ditches.
- ◆ Erosion protection measures at steep outfall sites (e.g. rip-rap, concrete chutes, or stilling basins).
- ◆ Cover lay down areas.
- ◆ Store the materials indoors.
- ◆ Cover the materials with a temporary covering such as polyethylene.
- ◆ Construct a berm around the material or enclose it.

## Training

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

## Inspections

- ◆ Conduct routine quarterly storm water inspections and within 24 hours after a rain event.
- ◆ Inspect the following areas:
  - ◆ Transfer and transmission lines.
  - ◆ Spill prevention.
  - ◆ Good housekeeping practices.
  - ◆ Management of process waste products.

- ◆ All areas exposed to precipitation will be visually inspected for evidence of or the potential for pollutants entering the storm drain system.
- ◆ All structural (berms and dikes) and non-structural BMPs will be inspected to ensure they are operating correctly.
- ◆ Complete the BMP checklist during each inspection and maintain the records for at least three years.

## 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 ADEQ.

## 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 an 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.