STORMWATER POLLUTION PREVENTION FOR INDUSTRIAL SITES

Brought to you By:

Contaminated stormwater is the largest source of pollution to our waterways. Storm drains carry runoff from streets, urban centers, open spaces and industrial sites, directly into nearby streams, ponds, rivers and oceans.

Industrial operations are only one contributor to the stormwater problem, but they are known to be a source of heavy metals, oils, salts and other hazardous substances. Reducing or eliminating exposure of stormwater to industrial waste is a proven way to reduce pollution to our surface waters.

HOW TO PREVENT STORMWATER POLLUTION AT INDUSTRIAL SITES

SALT STORAGE
Any facility using salt must manage its contact with stormwater. Usual BMPs include covering salt piles and installing an impervious pad under salt storage and other work areas. Other BMPs include:
- Using eco-friendly de-icing products,
- Applying salt or other de-icers sparingly,
- Sweeping salt that is tracked out of area,
- Training employees.

DUST CONTROL
Dust comes from smokestacks, vents, stockpiles, cleared ground, gravel roads, open areas and outdoor processing areas. Non-structural methods to control dust include:
- Storing all materials and waste inside facility,
- Routine cleaning of vents and filters,
- Regular sweeping,
- Spraying controlled amounts of uncontaminated stormwater to dampen dust-generating areas.

EROSION PREVENTION, SEDIMENT CONTROL and RUNOFF MANAGEMENT
Where soil is exposed to water, wind or ice, erosion can result. Typical non-structural BMPs that can be implemented to limit on-site erosion and control sediment include:
- Leaving as much vegetation as possible on site,
- Minimizing time that bare soil is exposed,
- Stabilizing disturbed soil as soon as possible,
- Preventing runoff from flowing over exposed areas.

ELIMINATING UNAUTHORIZED STORMWATER DISCHARGES (ILICIT DISCHARGES)
Your site’s stormwater system is designed to handle stormwater, but it is not designed to handle illicit discharges such as sewage or septic flows, washwater, oil spills, or other dumped materials. Non-structural BMPs for non-stormwater discharges include:
- Inspecting and testing floor drains, sinks, process drains (eliminating connections to storm sewers, surface or subsurface drains),
- Preventing mixing of non-stormwater and stormwater discharges; once mixed, the discharge cannot be managed as stormwater and requires a different permit.

SPILL PREVENTION & RESPONSE PROCEDURE
A spill prevention and response procedure enables your staff to quickly and consistently respond to any spills that may occur on site. Typical procedures include:
- Identifying potential discharge locations (drains or other stormwater access points),
- Identifying monitoring locations of surface waters that may be impacted by spill or necessary response,
- Developing and implementing proper material handling, storage and disposal routines,
- Posting contact information for all individuals or agencies that need to be notified in the event of a spill,
- Promptly reporting and documenting any spills or leaks to the appropriate parties,
- Properly training employees of spill prevention and response procedures.
STORMWATER POLLUTION PREVENTION PLAN

A Stormwater Pollution Prevention Plan (SWPPP) describes how you are going to reduce or eliminate stormwater pollution from your site's operation. Based on SIC codes and stormwater exposure, your facility may need to be covered under the Multi Sector General Permit (MSGP). If so, you need to prepare a SWPPP that summarizes your Best Management Practices (pollution control measures) such as the ones described on this brochure.

For more information on coverage under the MSGP, visit www.epa.gov/npdes/stormwater-discharges-industrial-activities#guidance

EMPLOYEE TRAINING

Employee training is crucial to making sure these BMPs are effectively implemented and actually reduce pollution. Training should occur at least once a year and can be achieved through formal classes, in-house training sessions, webinars, or other workshops. Be sure to ask your regional stormwater collaborative for necessary training materials.

LOW IMPACT DEVELOPMENT

Low Impact Development (LID) includes a suite of landscaping and site design techniques that maintain and utilize the natural, predeveloped ability of a site to manage rainfall. LID techniques capture water on-site, filter it through vegetation or other natural media, and let it soak into the ground where it can recharge the local water table rather than being lost and polluted as surface runoff. An important LID principle includes the idea that stormwater is not merely a waste product to be disposed of but a resource.

LID can easily be incorporated into any development or redevelopment project, even at the industrial level. Rain Gardens, Vegetated Swales, Bioretention Cells and Porous Pavement are all viable techniques that could be implemented at your industrial site.

For more information on these particular LID options, and other types of development and on-site stormwater management ideas, go to www.greenscapes.org/LID-Toolkit

IS MY SITE INDUSTRIAL?

The EPA has defined twenty nine different Sectors of Industrial sites that may be found in your community, and would require a MSGP.

Sector A - Timber Products Facilities
Sector B - Paper and Allied Products Manufacturing Facilities
Sector C - Chemical and Allied Products Manufacturing and Refining
Sector D - Chemical and Allied Products Manufacturing and Refining
Sector E - Glass, Clay, Cement, Concrete and Gypsum Product Manufacturing
Sector F - Primary Metal Facilities
Sector G - Metal Mining (Ore Mining and Dressing) Facilities
Sector H - Coal Mines and Related Facilities
Sector I - Oil and Gas Extraction Facilities
Sector J - Mineral Mining and Processing Facilities
Sector K - Hazardous Waste Treatment, Storage and Disposal Facilities
Sector L - Landfills and Land Application Sites
Sector M - Automotive Salvage Yards
Sector N - Scrap Metal Recycling and Waste Recycling Facilities
Sector O - Steam Electric Power Generating Facilities
Sector P - Motor Freight Transportation Facilities, Passenger Trans.
Facilities, Petroleum Bulk Oil Stations and Terminals, Rail Trans.
Facilities, and US Postal Service Trans. Facilities
Sector Q - Water Transportation Facilities with Vehicle Maintenance Shops
or Equipment Cleaning Operations
Sector R - Ship or Boat Building and Repair Yards
Sector S - Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas at Air Trans. Facilities
Sector T - Treatment Works
Sector U - Food and Related Products Facilities
Sector V - Textile Mills, Apparel, Other Fabric Product Manufacturing Facilities
Sector W - Wood and Metal Furniture Building and Fixing Facilities
Sector X - Printing and Publishing Facilities
Sector Y - Rubber and Misc. Plastic Product or Miscellaneous Manufacturing Facilities
Sector Z - Leather Tanning and Finishing Facilities
Sector AA - Fabricated Metal Product Manufacturing Facilities
Sector AB - Transportation Equipment, Industrial or Commercial Machinery Manufacturing Facilities
Sector AC - Electronic and Electrical Equipment and Component, Photographic and Optical Goods Manufacturing Facilities.

For additional "Industrial Fact Sheets" prepared by the EPA, visit: www.epa.gov/npdes/industrial-stormwater-fact-sheet-series