

GRAND CITIES COMMUNITY MATERIAL STORAGE PRACTICES

Storm Water Management Activities Fact Sheet No. 11

Goal/Purpose

Short Term:

Prevent the discharge of oils, greases, metals, sediment, and other contaminants from material and waste storage areas into the storm water conveyance system. Nonhazardous materials stored outdoors should be placed on a pallet and covered. Hazardous chemicals should be stored on a secondary containment unit and covered with a waterproof tarp.

Long Term:

Provide designated covered and/or bermed storage for all types of materials, including gravel, sand, etc., to minimize contact with storm water. Simple storage sheds with a roof, liquid-tight floor, and perimeter berm will prevent storm water from becoming contaminated.

Storm Water Management Activities

To comply with the individual Grand Cities Community Storm Water Pollution Prevention Programs (SWPPP), specific storm water runoff activities must be implemented at all local municipal facilities as required. This best management practice addresses only storm water protection requirements. Any group that stores, uses, handles, or disposes of hazardous substances must follow the appropriate local, state, and federal regulations. Depending upon the type of material being stored, in North Dakota, contact the North Dakota Department of Health, and in Minnesota, contact the Minnesota Department of Agriculture, or the Minnesota Occupational Safety and Health Administration for specific storage related questions.

Activity:

1. Always store hazardous and nonhazardous materials and wastes indoors or under cover whenever possible. Covers and upgradient perimeter berms that prevent contact with storm water will minimize any contaminants that could leave the site and make cleanup of any spills or leaks easier.
2. Minimize storage needs by purchasing appropriate amounts of material as needed for specific jobs. Stockpiling materials increases the possibility of pollutants flowing off-site.
3. Store chemicals away from doors and out of traffic pathways. Simple storage sheds with a roof, liquid-tight floor, and perimeter berm will usually prevent storm water from becoming contaminated.
4. Use drip pans (or other containment device) under taps, nozzles, and spouts to catch drips.
5. Transfer the contents of a leaking container promptly to another container; make sure the new container is appropriately labeled to Occupational Safety and Health Administration standards for all containers.
6. Always store materials under cover to prevent the leaching of any hazardous materials into storm water runoff. Minimize storage of scrap metal by disposing of it periodically.

7. Stockpiles of gravel, asphalt, sand, salt, and other raw materials should be stored in a way to prevent storm water flowing through the stockpile.
8. Cover stockpiles and put in upgradient perimeter berms to deflect the storm water. Install downgradient perimeter berms to prevent sediment and other contaminants from leaving the stockpile area.
9. Install covers to create permanent facilities for raw materials where appropriate.
10. Cabinets and containers exposed to the weather must be made for exterior use; interior-grade cabinets and containers will rust or deteriorate, contributing contaminants to storm water runoff.
11. Conduct preventative maintenance on secondary containment structures, pipes, valves, pumps, and other equipment to ensure proper operation and to identify potential leaks.
12. Liquid retained in bermed areas or in secondary containment units must be discharged to an oil/water separator, filtered, or properly disposed of off-site. The actual disposal method will depend on the composition and hazardous nature of the liquid.
13. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to clean or handle a spill unless the liquid will be completely contained, cleaned up and disposed of as appropriate for the waste type. There should be no discharge to storm drains, landscape, or pavement.
14. Return equipment and material to their proper storage place after use.
15. Schedule regular cleaning of outside storage areas and yards, preferably before the start of the rain season. At least once a year, review the stockpiled equipment and supplies. There are often unusable materials at the back of the storage area. Usable materials should be stored to indicate possible use and to minimize contact with storm water. Unused or unusable material should be removed as soon as possible. Develop a plan to regularly dispose of unneeded materials.
16. Always have spill response equipment available near the storage of liquid or hazardous substances.
17. Follow the Uniform Fire Code and National Fire Prevention Association (NFPA) standard when storing chemicals that are flammable, ignitable, or reactive.
18. Handling of infectious materials and wastes shall comply with the appropriate federal, state, and local rules and regulations.
19. Use containers that meet NFPA standards for holding hazardous substances and comply with the appropriate federal, state, and local rules and regulations.
 - This includes the following items:
 - a. Hazardous wastes must have secondary containment with capacities as specified by regulation.
 - b. Containers must be kept closed except when substances are being added or removed.
 - c. Regular inspections of the storage areas, secondary containment, and containers must be conducted for closed lids, leaks, correctly completed

- labels, and chemical compatibility.
 - d. Maintain a Hazardous Materials Management Plan.
 - e. Maintain a Spill Prevention, Control, and Countermeasures Plan for facilities that store petroleum.
 - f. Dispose of or recycle hazardous waste within the time lines set by the regulations based on a site's generator status.
 - g. Hazardous substances must be stored to prevent unauthorized people from accessing the area.
 - h. Transport of hazardous wastes between municipal sites must be handled and documented as required by regulation.
 - i. Completely label all containers holding hazardous materials and wastes.
 - j. Do not mix different types of hazardous wastes together.
20. All contractors shall provide a copy of their storm water awareness training and procedures for protecting the community storm water conveyance system as required by the Clean Water Act.

If the above-suggested activities require some modification in order to work efficiently and effectively for you and your staff or do not cover some aspect of your operations or facility, please contact the appropriate Grand Cities storm water representative:

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 Phone: (701) 746-2713
 E-mail: mshea@grandforksgov.com

John Thompson, City of East Grand Forks
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Carole McMahan, Grand Forks County
 Phone: (701) 780-8412
 E-mail: carole.mcmahan@gfcounty.com

Paul Clark, UND Facilities Department
 Phone: (701) 777-3005
 E-mail: paul_clark@mail.und.nodak.edu

For additional information on this or the local area community responsibilities under the National Pollutant Discharge Elimination System (NPDES) Phase II federal regulations for storm water discharges, visit the following Grand Cities Community Web sites:

City of Grand Forks:
<http://www.grandforksgov.com/gfgov/EnvironW.nsf/Main+Frameset?OpenFrameset>

City of East Grand Forks:
<http://www.ci.east-grand-forks.mn.us/>

Grand Forks County:
<http://www.co.grand-forks.nd.us/homepage.htm>

University of North Dakota:
<http://www.facilities.und.nodak.edu/stormwater.htm>

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