

Landscaped and Undeveloped Areas

Best Management Practices Fact Sheet

Goal/Purpose:

Initial

Minimize the discharge of herbicides, pesticides, fertilizers, and sediment from city landscaped or undeveloped areas into the storm water system.

Long Term

Implement an Integrated Pest Management (IPM) practices at every applicable site.

Storm water runoff from parking lots can easily be diverted to garden and lawn areas where the water will be infiltrated or evaporated. Make sure potential erosion problems are evaluated before using this practice.

Storm drains located within the landscape need to prevent dirt and debris from entering the storm drain system. Perimeter rocks and appropriately sized grate grids will keep debris out of the waterways.

Selection of Best Management Practice Activities

To comply with the city's Storm Water Pollution Prevention Program (SWPPP), specific best management practices (BMPs) must be implemented at municipal facilities and should be selected or developed on a case-by-case basis as required.

Activity

1. Identify alternatives to herbicide and pesticide usage, which also reduces the potential for storm water contamination.
2. Always follow the manufacturer's directions and state regulations when handling or applying chemicals.
3. Make sure that chemical containers are cleaned and disposed of according to state, county, and local regulations. Contact the local North Dakota Department of Health office for guidance on regulations, appropriate pesticide application certifications and licenses, and chemical-specific data.
4. Monitor weather conditions before applying chemicals and only use as directed by the manufacturer or regulating agency. Do not apply chemicals during or shortly before a rain event, as the storm may wash much of the product off-site.
5. Always have spill response equipment available during the handling and application of chemicals and near the storage area.
6. 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 in the sanitary sewer or off-site as appropriate for the waste type. Do not discharge any spilled liquid or solid waste to storm drains, landscape, or off-site.

7. Properly store pesticides, herbicides, and fertilizers as required.
8. Designate and train supervisors and staff to apply pesticides and herbicides properly.
9. Design or adjust the facility irrigation system to minimize overspray and prevent irrigation runoff.
10. Protect storm drains and water conveyances during landscape modification or replanting operations. Select from both source and treatment control BMPs. It is important to keep both vegetation and sediment out of the storm drain system.
11. Protect storm drains from sediment and vegetation when using disking to control vegetation.
12. Green waste should be recycled on-site or with the local trash hauler. Even though green waste is biodegradable, it can cause significant problems when transported into watercourses.
13. Evaluate the use of mulching mowers, which may be appropriate for some areas. Operators should be trained to evaluate whether to use mulching or not for a specific area so that storm water impacts are minimized.
14. Use mulching mowers at one or more sites.
15. Prevent soil erosion through the use of ground covers, manufactured covers, and mulches (which also maintain soil moisture).
16. Use native plants when possible to reduce chemical and water needs.
17. Store landscape equipment under cover whenever possible.
18. Designs for new development or redevelopment should consider retention of storm water on-site to reduce flows and removing contaminants to protect waterways and the ocean. The postdevelopment requirements are managed by the Planning and Zoning Department.

Contractors Requirements

1. Contractors must follow the city's pest management strategy for any city building or property where they provide ongoing service. Contractors must provide the city with a copy of their spill response procedures and training records.
2. Contractors must provide the city with a copy of their employee's applicator certification or other appropriate license or certification. Check with the North Dakota

Department of Health or Minnesota Pollution Control Agency if uncertain what certifications are required for a specific chemical treatment.

3. Ensure that contractors provide the city with a copy of their storm water awareness training and procedures for protecting the storm water system. These procedures should cover activities from cleaning to painting.
4. Contractors should recycle green waste and not allow grass clippings to remain in the storm conveyance systems, when feasible.
5. Contracts should contain specific language to inform contractors that they must comply with federal, state, and local storm water rules and regulations as required by the Clean Water Act. Existing contracts will be amended to include this language, if its not already included.

Employee Training

Staff training may include regular tailgate sessions at those facilities that load and unload significant amounts of chemicals or raw materials. Tailgate sessions should provide information on the selected storm water BMPs and methods for preventing discharge of pollutants into the storm drain system. Encourage employees to suggest modifications for existing BMPs and to create new BMPs; their suggestions will likely reduce labor and increase storm water runoff protection. If the above-suggested BMPs require some modification to work for you or do not cover some aspect of your operations or facility, call the city storm water representative at (XXX) XXX-XXXX for assistance.

Storm water BMP training may be incorporated with other training sessions such as safety training. Records of the training sessions should be kept for at least three years. These records should include who conducted the training, who attended, subjects discussed, and the date(s) of the training.

For additional information on this and other BMPs or the city's responsibilities under the National Pollutant Discharge Elimination System (NPDES) Phase II federal regulations for storm water discharges, see <http://www.XXXX.XXXX> or contact the city storm water representative at (XXX) XXX-XXXX for assistance.