



City of East Grand Forks

600 DeMers Ave · P.O. Box 373 · East Grand Forks, MN 56721
218-773-2483 · 218-773-9728 fax www.egf.mn

Public Works Department · 1001 2nd St NE · East Grand Forks, MN 56721

STORMWATER BMPs – GOLF COURSE/CITY PARK MAINTENANCE

AFFECTED FACILITIES

These Best Management Practices (BMPs) apply to all municipal golf courses and public parks.

BACKGROUND

The primary pollutants of concern in these types of facilities are trash, herbicides, pesticides and fertilizers. These pollutants, if allowed to enter into a stormwater system or surface water, can be toxic to aquatic life. Utilizing these guidelines and BMPs will help reduce the chances of these pollutants making their way into the city's stormwater system and waterways.

INTEGRATED PEST MANAGEMENT

Integrated pest management (IPM) is a pest control system that employs mechanical, biological, cultural, and/or chemical mechanisms as determined by a thorough evaluation of the conditions rather than addressing every condition with chemicals. IPM strategies are employed only when pest populations reach an unacceptable economic or aesthetic threshold.

The following are example IPM strategies:

- ✓ Cultural control – selected timing and location of plantings to avoid pests
- ✓ Host resistance – planting vegetation that is resistant to pests
- ✓ Mechanical control – weeding; setting insect traps
- ✓ Biological control – stocking beetles to attack purple loosestrife; protecting naturally-occurring insect predators, parasites, and pathogens
- ✓ Chemical control – using the least toxic pesticides available wherever possible

CHEMICAL PREPARATION AND HANDLING BEST MANAGEMENT PRACTICES

- Select the least toxic products available to minimize waste and applicator exposure.
- Use products only as directed, reading and following all labels.
- Inspect, maintain, and calibrate equipment used for mixing and application.
- Prepare only as much product as is needed.
- Be prepared with cleanup materials to cleanup spills immediately; use dry cleanup methods (e.g. squeegee and dust pan) rather than hosing down the spill site.

- Close containers tightly after each use, even if planning to reopen them soon.
- Store chemicals safely in a ventilated, well lit area that is away from drinking water wells or any other permanent or intermittent water bodies.
- Dispose of rinse water properly and recycle containers properly. For pesticides, triple rinsing or pressure rinsing with reuse of rinse water for future pesticide applications is recommended by the University of Minnesota. Proper rinsing of pesticide containers is also a requirement of Minnesota State and federal law.
- Monitor all fertilizer/pesticide application quantities and sites in order to provide guidance for future treatments.
- Keep products in their original containers and mark the date of purchase on each container. Use older materials first.

CHEMICAL APPLICATION BEST MANAGEMENT PRACTICES

- Employ an IPM, if an alternative is available.
- Consider having the soil tested before applying fertilizer in order to determine what nutrients must be added.
- Avoid application over impervious surfaces; sweep granular fertilizer back onto the grass to prevent it from washing into the storm sewer system.
- Apply when sufficient calm, dry weather is in the forecast to prevent drift and wash off. Lawn fertilization programs should begin in fall, not in spring; this will prevent shallow root growth. Tree and shrub fertilization programs should occur in late fall or early spring when the plants are dormant.
- Do not apply to bare or eroding soil.
- Do not apply near water systems such as streams and lakes unless the product is specifically designed for use in shoreline or aquatic environments.
- Do not apply near wells.
- Do not over fertilize. Too much nitrogen will cause plants to grow shallow roots creating a less hardy landscape (e.g. especially bad for athletic fields and parks) that requires more watering. Healthy trees and shrubs do not require annual fertilizing.
- Consider causes such as poor soils, insects, disease, or current weather patterns before applying fertilizer as a remedy for poor growth.

GENERAL BEST MANAGEMENT PRACTICES

- Pick up trash while doing routine maintenance or mowing.
- Empty trash receptacles every day.
- Use efficient irrigation methods and practices.
- Wear appropriate Personal Protective Equipment (PPE) at all times.
- Waste materials such as old fuel, solvents, oils, paints and dead batteries need to be disposed of properly.

- All fuels must be stored, dispensed and transported in accordance with local, state or federal regulations.

NEW CONSTRUCTION OR RENOVATION REQUIREMENTS

- An Environmental Impact Study shall be required for all new golf courses.
- Current permanent stormwater BMP designs (e.g. rain gardens, filter strips, etc.) for golf courses and public parks shall be utilized to the greatest extent possible.

REQUIRED TRAINING

Train all current employees who perform golf course/city park maintenance on these BMPs, the Landscaping & Lawn Maintenance BMP, and on the Spill Clean-up BMP annually.

Train all new hires and job transferees who will conduct golf course/city park maintenance on this BMP, the Landscaping & Lawn Maintenance BMP and on the Spill Clean-up BMP before they are assigned to their new duties.

All contracts must stipulate that contracted employees are trained in these BMPs.

ADDITIONAL INFORMATION

Household Hazardous Waste can be disposed of at:

Polk County Environmental Services Transfer Station

320 Ingersoll Ave

Crookston, MN 56716

Monday - 7:00am to 7:00pm

Tuesday through Friday - 7:00am to 5:30pm

Used motor oil and other waste automotive fluids can be disposed of at:

Public Works Department

1001 Second St. N.E.

East Grand Forks, MN 56721

(218) 773-1313

To report an Illicit Discharge, clogged sewer or for answers to questions regarding these stormwater BMPs please contact:

Public Works Stormwater/Wastewater Department

1001 Second St. N.E.

East Grand Forks, MN 56721

(218) 773-1313