



Minnesota  
Pollution  
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Division

# Best Management Practices for Minnesota's Old Dumps

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This Minnesota Pollution Control Agency (MPCA) fact sheet provides an overview of a recent Dump Assessment Study of old, non-permitted, municipal dumps and describes Best Management Practices for these sites. Best Management Practices are based upon these study findings and agency experience in assessing and managing dumps through MPCA's Superfund, Closed Landfill Program and Voluntary Investigation and Cleanup (VIC) Program.

The Dump Assessment Study, released in early February 2001, involved the screening (including a site visit) of 1,800 dumps in Minnesota. The study concluded that most old dumps, under current land use conditions, are a lower risk to public health and environment than many other environmental issues of concern to the MPCA. The MPCA did discover potential problems at many dumps that should be addressed by site owners. These problems may include:

- Unrestricted access to old dumps attracts illegal dumping.
- Physical hazards, such as scrap metal and junk, can injure wildlife and people who use the site (whether they are trespassing or not).
- Surface soils may be contaminated with hazardous materials and may pose a risk to those in direct contact with these soils.
- Ground water may be contaminated near the site.
- Storm water runoff from dumps near water bodies can pollute nearby rivers, streams, lakes or wetlands.

Development taking place on or near an old dump can increase the risks to public health and the environment and create a problem where none existed before. In addition, dealing with dump impacts can significantly increase the cost of redevelopment.

Most former municipal dumps were closed in the 1970s, as permitted landfills with larger capacity and better environmental protections began to accept most municipal waste. Closure measures taken by owners or operators at some dumps were better than at others.

**The Study concluded that many dumps do need more closure work to reduce nuisance conditions and owner liability.**

The MPCA recommends that owners implement the following Best Management Practices, along with any appropriate local ordinances.

## Best Management Practices for Dumps on Unused Property:

- **Leave the dump and adjacent land as undeveloped, open space.** Changing the land use on or near a dump can change the risk to public health and the environment.

**Development on or around the dump should generally be discouraged.** Intrusive activities, such as excavating, create potential contaminant exposure pathways and uncover wastes that may contain hazardous constituents. Also,





many old dumps still generate landfill gas that can migrate into enclosed buildings too close to a dump and build up to explosive and possibly toxic levels.

- **Close or limit access to the site and prohibit refuse disposal.** This can be accomplished by blocking access roads with a gate, fencing or earth berms. This will discourage future dumping as well as reduce potential risk to the public in terms of contact with contaminated soils or physical hazards on site. Signage, such as “no trespassing”, and “no dumping” may also help in discouraging unwanted activity at a site.
- **Remove dangerous physical hazards and surface debris.** Reduce the chance of injury by removing scrap metal, barrels or other containers (full or empty), asbestos-containing materials and appliances from the site.
- **Ensure that whenever workers are at the dump site they use personal protective equipment appropriate to the activity that they are undertaking.** Particular caution should be taken, as workers may be exposed to hazardous substances, contaminated soil or unexpected chemical and physical hazards.
- **The entire surface of the dump should be covered with clean fill that supports vegetation. In areas of the dump that have not been previously covered, or show bare soil, add two feet of clean fill.** Local and county public works departments may be good resources for finding appropriate sources of cover material. Cover soil will minimize surface contact with possible hazardous materials in the dump and reduce surface water seepage into the dump materials and groundwater. The soil must be able to support vegetation.
- **Vegetate the surface soil.** Vegetation reduces runoff and erosion, provides habitat, and improves the appearance of the property. Seed mixtures for vegetating sites are commonly available from local nurseries or agricultural outlets. Using native prairie grass mixtures or certain Minnesota Department of Transportation mixtures (such as seed mix #5) can also improve site aesthetics.

- **Record a notarized affidavit with a detailed description of the dump with the county recorder of deeds.** This document should include a legal description of the boundaries of the filled area, the size of the filled area in acres, the depth of fill and anything that is known about the types of waste buried. The affidavit should also reference any investigation reports.
- **Contact your county solid waste officer or the MPCA for additional guidance** in implementing these Best Management Practices. At the MPCA, contact John Curry, (651) 296-9435 or toll-free/TDD (800) 657-3864. Also, seek guidance if you plan to conduct any excavation or change the slope and water runoff at the dump.

### Proposed Development or Land-Use Change at or Near Old Dump Sites

If the dump is near developed land or may undergo development in the future, the developer should contact local zoning authorities and the MPCA and retain the expertise of an environmental consultant. Assistance from the MPCA Voluntary Investigation and Cleanup (VIC) Program is available to dump owners or operators who wish to receive project oversight and formal liability assurances from the MPCA for site closure or redevelopment.

To learn more about the VIC Program and investigation and cleanup of dumps, see VIC Guidance Document #19: Approach to Investigating and Remediating Abandoned Dumps, at <http://www.pca.state.mn.us/cleanup/vic.html> or contact Jerry Stahnke of the VIC program at (651) 297-1459 for more information.

### Old Dumps with Agricultural Chemical Containers

For information on dumps that may contain large quantities of pesticide containers, contact the Minnesota Department of Agriculture (MDA) at (651) 297-4981.

[To learn more about MDA’s Empty Pesticide Container Collection and Recycling Program, contact Steve Poncin at \(651\) 296-5136.](#)