



Minnesota
Pollution
Control
Agency

Update: Pig's Eye Dump

Metro District,
Site
Remediation
Section

Cleanup/C0-09/December 1999

This fact sheet provides an overview of the Minnesota Pollution Control Agency's (MPCA's) activities at the Pig's Eye Dump, a state Superfund site in St. Paul, Minnesota. It is provided in response to community interest about the site, as well as to inform the public about recent efforts by the MPCA and the city of St. Paul to begin site cleanup.

Where is the Pig's Eye Dump?

Pig's Eye Dump is located in the Mississippi River floodplain east of downtown St. Paul. It is located east of the Mississippi River, northeast of the Metropolitan Council Environmental Services Metro Wastewater Treatment Plant, and northwest of Pig's Eye Lake.

What is the history of the dump?

Pig's Eye Dump operated between 1956 and 1972, accepting waste from communities, businesses and industry in the east Metro area. Much of the waste was deposited in wetland areas on the property. MPCA records show that an estimated 8.3 million cubic yards of waste was disposed of on the 250-acre property. (Another former unpermitted area, the Fish Hatchery Dump, is not included in this estimate.) This makes the Pig's Eye Dump the largest unpermitted dump site in the state.

From 1977 to 1985, the site also was used for the disposal of sludge ash by the Metropolitan Waste Control Commission. An estimated 236,000 cubic yards of ash

were placed on top of old garbage in compliance with a solid waste permit issued by the MPCA.

The MPCA listed Pig's Eye on the state Superfund list, the Permanent List of Priorities (PLP), in 1989. Using a federal Hazard Ranking System (HRS), which helps in prioritizing sites and assessing the risk posed to the environment, Pig's Eye scored 42.5 (on a scale of 0 – 100).

Since 1979, the MPCA has received five reports on the environmental impacts of the Pig's Eye Dump. In 1994, the MPCA conducted a limited investigation of the site, including ground water and surface water sampling. In 1998, the city of St. Paul (which operated the facility at one point in its history) hired a consultant to prepare a response action plan and a cost estimate for cleanup. This plan was submitted to the MPCA in November 1999.

What risks does the Pig's Eye Dump pose to public health and the environment?

Because the ground water beneath the dump is not used for drinking or cooking, any contaminants found in ground water don't pose a public health threat. Contaminants can run off the site or move through ground water into Pig's Eye Lake, a backwater of the Mississippi River. The main health risk is from surface exposure to contaminants and debris scattered on the property.





Community members should make sure that children know not to go on the property.

While the site isn't considered to be a major health risk, it does pose significant environmental risks. These are particularly important to wildlife, including a blue heron rookery, located south of the dump. Among the specific environmental risks are:

- Discharges to Pig's Eye Lake, which exceed water quality standards for polychlorinated biphenyls (PCBs), lead, boron, cobalt, aluminum, zinc, ammonia, chloride and mercury.
- Exposed drums on the bank of a creek that flows through the site, some containing unknown substances.
- A battery disposal area that was used for disposal of lead-acid batteries, where sampling has found very high lead levels in soil.
- Erosion caused by Battle Creek, which flows through the site and discharges to Pig's Eye Lake. The erosion has exposed garbage, debris, and drums.
- Lead- and cadmium-contaminated sediments in Pig's Eye Lake and on the shoreline.

If the site has been on the Superfund list since 1989, why hasn't the MPCA completed cleanup?

The Pig's Eye Dump has always posed difficulties for the MPCA, because it is not a good fit for any of the state's cleanup laws. Its location also poses unique challenges.

The usual method of addressing landfills is to install monitoring systems for ground water and methane gas, as well as a nonpermeable cover. Such actions cause rain and snowmelt to run off instead of seeping through the wastes and picking up contaminants to pollute the ground water. In addition, some landfills have a system of barrier wells established to protect nearby water bodies from the migration of contaminated ground water.

The Pig's Eye Dump is located on a flood plain, so that during high water events, a nonpermeable cover is essentially of little use. Given the enormous amount of rain water and ground water that discharges from the landfill to the lake, a barrier system is not feasible. Also, an active pumpout system is unlikely to work, since the dump is too close to the river.

Removing, sorting, and re-burying or incinerating all of the wastes also is out of the question, considering the huge volume of wastes located in the Pig's Eye Dump.

In addition to the technical difficulty of cleaning up Pig's Eye Dump, there are legal issues. The state Superfund Program is based on a philosophy of "polluter pays." This means that the individuals, communities and groups that contributed to the dump are considered responsible for investigating and cleaning it up.

However, at Pig's Eye Dump, that list of "responsible parties" could include tens of thousands of people and organizations. To pursue responsible parties, provide legal documentation, undertake legal action, and assess the amount of waste each deposited in the dump more than 25 years ago, the state would have to expend substantial resources. Almost every community, small business, or large industry in the east Metro could likely be named responsible under Superfund.

The Minnesota Legislature solved a similar problem for old permitted landfills by establishing the Landfill Cleanup Program (now the Closed Landfill Program) in 1994. This law successfully removed permitted landfills from Superfund and made them a public responsibility. However, the law does not include unpermitted dumps, such as Pig's Eye.

The MPCA is working with the Minnesota Legislature on the problem of old permitted dumps, seeking a solution for these facilities. (There are more than 1,000 such dumps in Minnesota.) Currently, the MPCA is conducting environmental assessments of 40 – 80 dumps with one million dollars appropriated by the Legislature. In the year 2000 legislative session, recommendations for dealing with unpermitted dumps will be discussed.

What is the MPCA's recommended clean-up plan for Pig's Eye Dump?

While it is unlikely that the Pig's Eye Dump will ever be completely cleaned up, there are several ways that "hot spots" of contamination can be eliminated or minimized. Among the recommendations included in the city of St. Paul's remedial action plan are:

- Augmenting the shoreline of Pig's Eye Lake with organic rich soils that can slow the migration of contaminants to Pig's Eye Lake.



- Stabilizing lead-contaminated soil in the battery disposal area by mixing it with a cement-like substance that fixes the lead, keeping it from running off the site or leaching into the ground water.
- Augmenting the site with cover material, so that there is at least two feet of cover over the entire site and planting trees to prevent erosion and draw contaminants from the ground water.
- Filling in ponds in the southeast and southwest portions of the dump with organic rich soil and planting with trees to prevent erosion and encouraging biological removal of contaminants.
- Removing exposed drums along Battle Creek.
- Stabilizing Battle Creek and a railroad ditch to prevent erosion, then planting trees.

The cost of completing all of these actions would be substantial – in the millions of dollars.

When do cleanup actions begin?

On December 8, 1999, the MPCA began a selective drum removal action with state Superfund dollars. The goal is to remove drums currently exposed along Battle Creek. Additional activities are unlikely unless funding for site cleanup is available.

Whom do I contact for more information?

For more information about the site and cleanup plan, contact Frank Wallner at (651) 296-7443 or Richard Baxter at (651) 297-8471, MPCA Metro District, Site Remediation Section. For more information about the state Superfund Program or community involvement in MPCA's clean-up programs, contact Kathy Carlson, MPCA Metro District, Operations and Planning Section, at (651) 297-1607.

MPCA Web Site: <http://www.pca.state.mn.us>