



Minnesota
Pollution
Control
Agency

Majors and
Remediation
Division

Proposed Cleanup Alternatives for the Shafer Metal Recycling Superfund Site

Geographic/Hennepin County/#27.05/May 2002

This Minnesota Pollution Control Agency (MPCA) fact sheet describes the proposed cleanup alternatives for the Shafer Metal Recycling Superfund Site in Minneapolis. The MPCA will accept public comments on the proposed cleanup alternatives for this site before making a final decision.

Based on new information or public comments, the MPCA may modify its recommended method for cleanup or select another alternative.

Where is the facility located?

The former Shafer Metal Recycling Site is located at 129 Plymouth Avenue North in Minneapolis, Minnesota. This triangular-shaped site is approximately 1.5 acres in size. It is bordered on the north by Plymouth Avenue North, on the southwest by Second Street North, and on the east by railroad tracks and the Minneapolis Star Tribune distribution facility. The site is about one mile northwest of downtown Minneapolis and one-fourth of a mile from the Mississippi River. The Minnesota Department of Transportation (MnDOT), Cowles Media, and the city of Minneapolis own the site. Currently, this site area is zoned for medium-level industrial businesses like office warehouses, truck terminals, or vehicle maintenance facilities.

What is the history of this site?

MnDOT acquired this property in 1969 because of the anticipated development of Interstate 335. This proposed interstate freeway project was cancelled and MnDOT leased the facility to Union Scrap Iron and Metal Company (Union Scrap). Union

Scrap converted the building into a battery recycling operation. The operation was known as Shafer Metal Recycling. It was one of several metal recycling facilities in the area operated by Union Scrap.

Typically, batteries were brought to the site, stockpiled, and cracked or split open to remove the lead plates. The lead plates were shipped off site. Acid from the batteries drained onto the floor of the building or onto the ground outside depending upon where cracking or splitting of the batteries took place. Liquid from the cracking operation inside the building was channeled into an above-ground concrete tank that led to the sanitary sewer floor drain. There was no attempt made to collect liquids spilled onto the ground outside the building.

In the early 1980s, a concrete tank was removed and a 45-foot trench was dug through the deteriorated floor to collect overflowing liquids. Liquids that collected in the trench were discharged to the sanitary sewer.

Battery recycling activities ended in 1982. The MPCA and Union Scrap entered into a Stipulation Agreement in 1983 that required the company to define the extent of soil and ground-water contamination at the site.

Union Scrap filed for bankruptcy in 1985. Following this notification, the MPCA staff informed MnDOT staff that Union Scrap was bankrupt. This meant that MnDOT would become the lead responsible party for the site.





MnDOT expressed a willingness to accept the leadership role among the responsible parties involved in the cleanup activities at the site.

In August 1986, MnDOT began investigating the site by sampling soil and installing monitoring wells. Locations for soil sampling and monitoring wells were based on discussions with MPCA staff, previous investigations, and aerial photographs.

MnDOT submitted a Feasibility Study in September 1987. However, the proposed remedy was not approved by the MPCA.

In March 1991, the MPCA issued a Request for Response Action (RFRA) to MnDOT. The purpose of the RFRA was to formally request that MnDOT conduct a Remedial Investigation/Feasibility Study (RI/FS) and complete the necessary actions at the site.

MnDOT submitted a RI/FS work plan to MPCA in 1991. The scope of the RI/FS was revised in an addendum to the work plan in 1994. It was based on agreements reached between the MPCA and MnDOT. The actual investigation began in March 1995. A Remedial Investigation/Focused Feasibility Study (RI/FFS) report was submitted in September 1995. The MPCA approved the RI/FFS in July 1996.

A design remedy for the removal of contaminated soil from the site was tentatively approved in August 1998. In August 2001, the MPCA and a trust (group of potentially responsible parties) signed a consent order agreeing to implement a remedy at the site.

What type of contamination has been found at this site?

The primary concern at this site is lead in the soil. The lead came from the batteries that were split and cracked at the site. The lead levels are high enough to be considered hazardous.

Lead is toxic to humans. In children, lead poisoning can slow a child's development and cause learning and behavioral problems. Adults with high lead levels may have headaches, high blood pressure, digestive problems, memory and concentration problems, mood changes, sleep disorders, and muscle and joint pain.

Cadmium is also present at the site, but current readings are found at levels below the health risk criteria for industrial settings. Cadmium levels in the soil will be

checked during cleanup to verify that cadmium levels are remaining low. The ground water has been sampled, but levels of metals in the ground water do not exceed applicable health risk criteria and standards.

What cleanup has occurred so far?

In 1982, Union Scrap initiated several actions. The building surfaces were scraped clean. Soil from the trench and the top three inches from the southern part of the site were excavated and removed. In addition, the building was demolished and removed from the site. The basement below the former office area was filled with imported clean soil.

In November 1985, MnDOT installed a fence around the perimeter of the site to control access to the public. A steel fence has also been constructed between the site and the property that is due east of the site.

Summary of response action alternatives

The response action alternatives identified in the feasibility study and under consideration at the Shafer site are:

1. No action.
2. Excavation of lead-contaminated soil with off-site stabilization and disposal at an appropriate facility.
3. Excavation and on-site stabilization of lead-contaminated soil with off-site disposal at an appropriate facility.

The no action alternative is the least expensive option, but does not protect human health or the environment from potential risks posed by the site. Therefore, this alternative was dropped from any further consideration.

The primary differences between the two excavation alternatives are the sequence of activities and the associated regulatory issues concerning the disposal location. Initial cost estimates show that the on-site soil stabilization method is less expensive than the off-site soil stabilization method. The on-site method is preferred by the MPCA because it would render the contaminated soil harmless before it leaves the site.

The MPCA recognizes that on-site and off-site methods are essentially equal based on criteria like long-term effectiveness, ability to implement, short-term risks, and community acceptance.



Therefore, if the responsible parties select the off-site method, it could be approved by the MPCA. Sufficient precautions would be necessary to ensure that the soil is contained and controlled during shipment to the disposal facility.

After evaluating the alternatives, the on-site method is appropriate method for this site. It provides both short-term and long-term benefits. It can be readily implemented, provides for reduction of site contaminants, and reduces the chance for ground-water contamination. Also, this method is compatible with the intended site plans for commercial development.

Upcoming public meeting

A public availability session will be held at DeLaSalle High School in the Robert Casanova Room on May 13, 2002. The MPCA and MnDOT staff will be available for individual questions from 4:30 p.m. to 6:30 p.m.

DeLaSalle High School is located at One DeLaSalle Drive in Minneapolis. It is located near Riverplace and Nicollet Island Inn off Main Street and Merriam.

How do I comment on the proposed cleanup alternatives or get more information?

As part of the Superfund process, the MPCA provides an opportunity for the public to comment on the proposed cleanup alternative. The MPCA staff will be accepting public comments on the proposed cleanup alternative until June 4, 2002, at 4:30 p.m. Comments can be mailed to:

Nile Fellows
MPCA – Superfund Section
Majors and Remediation Division
520 Lafayette Road North
St. Paul, MN 55155-4194

The MPCA staff will review these comments and make a final determination about cleanup to be included in the Minnesota Decision Document. All comments received during the public comment period will be included in the Minnesota Decision Document along with the MPCA's response to those comments. Construction will begin after the issuance of the Minnesota Decision Document.

If you have questions please call Nile Fellows of MPCA at (651) 296-7299 or toll-free at (800) 657-3864.

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