



Update on Bassett Creek/Irving Avenue Dump Superfund Site, Minneapolis

This Minnesota Pollution Control Agency (MPCA) fact sheet provides an update on the Bassett Creek/Irving Avenue Dump site, and outlines the MPCA's plans to close out the site and remove it from the Minnesota Permanent List of Priorities (PLP), the state Superfund list. In addition, this fact sheet describes the MPCA's decision-making process.

The MPCA has drafted, as part of the Superfund process, a Minnesota Decision Document (MDD) that summarizes the investigation and cleanup work completed at the site. The MPCA will post the draft MDD on its website and invite the public to submit comments during the public comment period. The site will not be proposed for removal from the PLP until after public comments on the draft MDD are reviewed and responded to, and the MDD is made final.

Site location

The site, in Minneapolis, Hennepin County, Minnesota, covers approximately 35 acres in an area just west of downtown and slightly northwest of the intersection of Interstate Highways 94 and 394. The main feature of the site is the city of Minneapolis impound lot, which is used for storing impounded vehicles (See Figure 1 on page 3 of this fact sheet).

Background

The site is a former wetland that was utilized as a dump, mainly before the 1960s. According to previous investigations, 10 to 20 feet of fill with dump debris (concrete, ash, brick, asphalt, glass, wood, limestone, transite, tiles and metal) is present at the site. Elevated concentrations (that is, above regulatory levels) of lead, polynuclear aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs) have been identified in soil, soil gas, and groundwater at the site.

The MPCA added the site to the Permanent List of Priorities (PLP) on November 30, 1986. Shortly thereafter, the city of Minneapolis voluntarily began to work with the MPCA to investigate and remediate the site. As part of its voluntary cooperation with the MPCA, the city reimburses the MPCA for its costs on an annual basis.

Documents submitted by the city of Minneapolis

The city of Minneapolis hired environmental and engineering consultants to investigate the site and recommend cleanup actions and alternatives. On behalf of the city, the consultants prepared and submitted reports and other documents for MPCA review. MPCA staff have based their decisions on a number of key documents. These documents describe the site characteristics, evaluate selected alternatives, and describe the effectiveness and cost analysis of various response actions for the site and include:

- Remedial Investigation Report, dated August 1, 1990
- Remedial Investigation Addendum, dated January 7, 1993
- End Use Plan, dated July 22, 1998
- End Use Plan Final Report, dated February 1, 2001
- Environmental Investigation Results, dated February 17, 2012
- Addendum to Environmental Investigation, dated October 16, 2012
- Additional Investigation Addendum, dated November 13, 2012
- Response to Comments, dated March 26, 2013

Description of response actions completed

In 1992, the U.S. Army Corps of Engineers (COE) completed a flood-control project for the Bassett Creek Watershed. As part of the project, the tunnel spoils, which contained elevated concentrations of lead, were generated and consolidated in an area near the central portion of the site.

In 1993, the city of Minneapolis submitted an Interim Response Action (IRA) Plan and an IRA Plan Addendum. The city had considered a number of response action alternatives to address potential human health and environmental risks at the site before proposing IRAs.

With the MPCA's approval, the city implemented several IRAs (e.g., tunnel spoils consolidation and paving) that focused on reducing potential risks posed by contaminated soil. These IRAs helped the city prepare an End Use Plan, which was submitted to the MPCA in July 1998. The End Use Plan Final Report was submitted in February 2001 and was approved in March 2001.

In 1998, as part of the End Use Plan, the city further consolidated tunnel spoils, covered the spoils with two feet of clay, and capped them with asphalt. In the fall of 2011, the city conducted several investigations, and completed additional paving activities in the western portion of the site. Over half of the site is now capped with asphalt (see Figure 1 on page 3).

Summary of Investigative results

The results of several environmental investigations established a list of contaminants of concern for the site. The contaminants of concern in soil include lead, arsenic, copper, mercury, benzo(a)pyrene (BaP) and its equivalents, naphthalene and polychlorinated biphenyls (PCBs).

2011 groundwater data show that current VOC and PAH concentrations are mainly low to nondetectable. Methane is the only VOC of concern in groundwater, and concentrations may be as high as 10,000 micrograms per liter ($\mu\text{g/L}$). However, there are no nearby drinking water receptors, so the drinking water pathway is not a human health concern for groundwater. On the other hand, VOC-contaminated groundwater can be a source for soil vapors, so methane-contaminated groundwater is a potential problem in soil gas.

Because potential soil exposure is a pathway of concern for human health, the MPCA selected soil reference values (SRVs) as reasonable and appropriate cleanup levels. As established by the End Use Plan, the site will continue to be used in an industrial setting. Therefore, the applicable soil cleanup levels are the industrial SRVs (see <http://www.pca.state.mn.us/index.php/view-document.html?gid=3154>).

Soil gas investigations in 2011 and 2012 demonstrated that methane is the main contaminant of concern in soil gas. However, data show that methane soil vapors are localized and that workers in buildings at the site are not exposed to detectable concentrations of methane vapors. Methane mitigation and other response actions may be necessary if the site is redeveloped for a different use. So, the city is required to notify the MPCA if there is a change in the property use at the site.

The city's recent investigations have demonstrated that the surficial soils (i.e., top four feet) that have not been capped with asphalt meet the applicable MPCA industrial soil reference values for lead, PAHs, VOCs and other potential contaminants of concern. Soil gas and indoor air sampling conducted in 2011 and 2012 have shown that methane and other VOCs do not currently pose a risk to human health via the inhalation pathway.

MPCA recommendations

Based on the results of the 2011 and 2012 investigations and on the MPCA-approved End Use Plan, the MPCA recommends that no further actions are necessary in response to releases identified at the site. Therefore, the MPCA also recommends that the site be removed from the PLP.

What happens next?

The public will be invited to review the draft MDD and submit comments to the MPCA during the comment period. The public comment period will be posted in the Bryn Mawr Bugle/North News in mid-June, and the draft MDD will be available for review on the MPCA website. Written comments should be submitted

should be submitted to Fred Campbell, MPCA project manager. The MPCA will respond to comments, and the comments and responses will be incorporated into the final MDD.

After the final MDD is approved, the MPCA will propose to remove the site from the PLP. There will also be a public comment period for the PLP-delisting process. The PLP-delisting event will likely take place in the fall of 2013.

Figure 1

