

Frequently Asked Questions

Regarding Arsenic Soil Contamination at the Roof Depot Site

What are the levels of soil arsenic contamination at Roof Depot?

Over 80 soil samples were collected from under the Roof Depot building and analyzed for arsenic. Of the samples analyzed, seven exceeded the Minnesota Pollution Control Agency's arsenic Soil Reference Value (SRV) of 9 milligrams per kilogram (mg/kg). The seven samples exceeding the arsenic SRV are scattered around the site and have concentrations ranging from 15.5 to 174 mg/kg. Additional samples collected below these seven samples did not exceed the SRV. Soil with arsenic concentrations exceeding the SRV are limited to the top four feet of soil.

What is the difference between arsenic contamination at the Former CMC Heartland Lite Yard site (CMC Site) and Roof Depot?

While the highest documented arsenic concentration in soil under Roof Depot is 174 mg/kg, the highest concentrations of arsenic under the former CMC Site were over 18,000 mg/kg. The concentrations of arsenic under the Roof Depot are hundreds to thousands of times less than those at the CMC Site. Approximately 4,000 cubic yards of arsenic contaminated soil will be excavated at Roof Depot compared to over 60,000 cubic yards removed from the CMC Site. Although the arsenic soil concentrations and soil volumes are considerably different between the sites, the Roof Depot removal process will implement safety procedures like those successfully applied to the CMC Site to protect public health.

How is arsenic contaminated soil at Roof Depot being addressed?

The MDA approved three excavations within the Roof Depot building footprint to remove arsenic contaminated soil once the building is removed. These excavations will occur to depths of 2-5 feet below ground surface. The MDA estimates that approximately 4,000 cubic yards of arsenic contaminated soil will be removed. After the excavation of these three areas, confirmation samples will be collected from the sidewalls and bases of the excavations to ensure that soil with arsenic above the SRV is removed. Clean backfill will be used to bring the excavation to grade.

How will dust be controlled during the excavation of the arsenic contaminated soil?

During the Roof Depot site soil excavation, several dust suppression methods will be used to minimize generation and dispersion of dust. Contaminated soil will not be disturbed until the demolition of the building and other hardscapes are removed. If excavation doesn't occur immediately after building materials are removed, clean fill will be placed over contaminated soil. Excavation work will be completed in phases to minimize the amount of soil exposed at any given time. Excavated areas and exposed soils will be misted with water to curb the creation of dust. MDA staff will visit the site during the arsenic soil excavation to ensure the process proceeds according to the MDA approved Response Action Plan. The MDA does not have regulatory authority over the demolition of the Roof Depot building. However, dust suppression methods will be used during the demolition of the building, and any dust generated is not expected to contain arsenic.

What controls will be in place to prevent runoff and erosion from the site?

The amount of water used for dust suppression will be controlled to ensure runoff does not occur. The construction contractor will be responsible for other control measures, including the installation of silt fences at site boundaries and near excavations. The construction contractor is responsible for street sweeping to prevent muddy or dusty conditions on city streets.

How will air quality be monitored during the excavation?

An onsite weather station will provide wind direction information. Twelve real-time air monitors will be installed around the perimeter of the site during the excavation of arsenic-impacted soils. An airborne particulate standard of 1.6 milligrams per cubic meter will be used as an exposure standard at the site. The environmental consultant will be present during contaminated soil activities to monitor air quality and oversee dust suppression.

What happens to the arsenic contaminated soil after it is excavated?

According to the excavation plan, Arsenic-contaminated soil will be disposed of at the SKB Environmental Landfill in Rosemount, Minnesota, a permitted industrial waste landfill.

Will groundwater below the site be encountered during excavation activities?

Shallow groundwater at the site is located approximately 25-feet below ground surface. Excavations of arsenic-contaminated soil will be limited to the top 5 feet of soil. Based on proposed excavations at the site, the MDA does not anticipate that groundwater will be encountered during excavation activities.

Is groundwater at the Roof Depot site contaminated with arsenic?

Groundwater below the Roof Depot site is contaminated with arsenic that originated from the adjacent CMC Site located east of the Roof Depot site. In 2005, the Minnesota Department of Health (MDH) established a Special Well Construction and Boring Area (SWCBA) for the site and surrounding area. The SWCBA requires MDH review of all wells proposed within the SWCBA. The city of Minneapolis' water supply comes from the Mississippi River. The contaminated groundwater under the Roof Depot does not affect the city's drinking water supply.

Should I be concerned about arsenic dust from the excavation reaching my home?

Given the low levels of arsenic found in soil at the Roof Depot site and the dust monitoring and mitigation practices in place, dust generated during excavation of arsenic contaminated soil will be suppressed. Any dust moving off the site is expected to be negligible and the concentration of arsenic would be below levels of health concern.

After remediation of the CMC Site, a study was conducted which analyzed arsenic concentrations found in urine in children living near the CMC Site. What did the study show?

Based on the MDH Minneapolis Children's Arsenic Study, there was not a relationship between the soil arsenic concentrations found in residential soil and arsenic concentrations in urine in children tested. While no relationship was found, the absence of a correlation between arsenic urine levels and soil arsenic levels in the study does not suggest an absence of risk from soil contamination. The study recommended following public health policies that minimize exposure risks to residents, including continued remediation and prevention of soil ingestion.

Who can I contact if I have health concerns?

If you are experiencing health effects, contact your health care provider.

If you have concerns about a hazardous chemical exposure, contact the MDH:

Minnesota Department of Health
Site Assessment and Consultation Unit
Phone: 651-201-4897
Email: health.hazard@state.mn.us

For questions or concerns regarding arsenic in soil, contact the MDA:

Paul Haiker
Minnesota Department of Agriculture
Incident Response Unit
Phone: 651-201-6199
Email: Paul.Haiker@state.mn.us