

EPA Summary of Findings (August 26, 2016)

Eastern Heights Neighborhood Playground (Tallahoma Drive)

On May 3, 2016, the United States Environmental Protection Agency (EPA) conducted environmental sampling on the playground located on Tallahoma Drive in the Eastern Heights neighborhood. The purpose of the sampling was to determine whether contamination was present in the soil or groundwater that may be related to the Grenada Manufacturing, LLC, facility, and to evaluate if any further response actions are necessary to protect public health and the environment. The Grenada Manufacturing facility is located a quarter mile south of the playground.

Several investigative samples were collected on the property. Two surface soil samples were collected to evaluate the potential risk to people using the playground. Each of the surface soil samples consisted of five subsamples taken within the play area and combined into one sample. The surface soil samples represent the soil that people using the playground may contact. In addition, one soil boring was drilled on the property from the ground surface to 18 feet below ground surface. An 18-foot soil core was collected and inspected. Two investigative samples were collected from the soil core: one subsurface soil sample was collected 4-6 feet below ground surface and one subsurface soil sample was collected 10-12 feet below ground surface. In addition, one soil gas sample was collected 12 feet below the ground surface, and one groundwater sample was collected from 13-18 feet below the ground surface. Though people using the playground are not expected to contact the groundwater or below-ground soils, the EPA collected these samples to gather more information about environmental conditions.

The soil, subsurface soil and groundwater samples collected were analyzed for metals and volatile organic compounds. The soil gas sample was analyzed for a targeted list of volatile organic compounds. The EPA has evaluated the laboratory results and has determined that all results for the playground are within the EPA's acceptable risk range. The results are presented below.

Surface Soil

One contaminant, arsenic, was detected in surface soil above the Regional Screening Level for residential soil. (Regional Screening Levels are values used by the EPA to determine if a contaminant should be considered for further evaluation.) Arsenic was detected from 2.6 milligrams per kilogram (mg/kg) to 3.7 mg/kg. The amount of arsenic in surface soils is within the EPA's acceptable risk range (assuming daily, chronic exposure) and does not indicate a need for further evaluation or response. Also, the amount of arsenic detected on the property is low and is consistent with naturally occurring levels of arsenic in soil.

Subsurface Soil

Arsenic was detected in the subsurface soil samples at 3.5 mg/kg and 9.2 mg/kg. These soils were collected at 4-6 feet below the ground surface and 10-12 feet below the ground surface. The levels of arsenic detected in the subsurface soil samples is within the EPA's acceptable risk range for residential soils. The EPA used the surface soil screening values to evaluate the subsurface soil, even though regular exposure to subsurface soil is not expected. Using the conservative screening values to evaluate the subsurface soil results, the EPA determined that there is no need for further evaluation or response. Additionally, the soil core was inspected by field personnel; there was no evidence of buried material.

Soil Gas

There were no contaminants detected that exceed the Regional Screening Levels for vapor intrusion.

Groundwater

Groundwater is not used for drinking, and people using the playground are not expected to contact groundwater. However, the EPA collected a groundwater sample 13-18 feet below the ground surface. Arsenic and lead were detected above the federal drinking water standards. Arsenic was detected at 25 micrograms per liter (ug/l) and lead was detected at 18 ug/l, in an unfiltered sample. While these levels are above drinking water standards, they do not pose a threat to playground users.